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ABSTRACT

This document describes a 2-year study on students and faculty perceptions of factors that enhance or impede student progress in the successful completion of a Technical-Occupational Program in four public community colleges and one technical college in Texas. Initiated in 1989, the Assessing Minority Opportunities in Vocational Education project of the El Paso Community College District (EPCCD) involved the collection and analysis of data from minority students and faculty regarding their perceptions of those college practices that enhance and/or impede technical-occupational student completion rates. Survey instruments were distributed to 360 minority faculty and 2,439 minority students in technical-occupational programs at the two-year colleges mentioned above. During the second year of the project, modified surveys were administered to 565 white non-Hispanic faculty and 2,322 white non-Hispanic students at the same institutions. The institutions were selected because they represented nearly 50% (474 of 977) of the minority technical-occupational faculty in the state. Usable surveys were returned by 224 minority faculty (62.2%) and 342 white faculty (60.5%), while 425 minority students (17.4%) and 581 white students (25%) returned usable surveys. The student surveys examined demographic variables; reasons for entering programs; satisfaction with remediation, college programs, and services; self-reported basic skills levels; perceptions concerning the qualities of good instructors; and reasons for persisting to program completion. The faculty surveys were developed to examine faculty perceptions of the same variables (e.g., "from your minority students' point of view, how would you rate the following services..."). Based on study findings, recommendations were developed for further demographic research; improving faculty involvement with students, for recruiting more underrepresented minority students into specific programs; increasing retention services; and tailoring financial aid programs to those in technical/occupational course tracks. This project report includes a review of work-force data; an examination of student retention factors; a detailed analysis of survey results; study recommendations; data tables; the survey instruments; and a 38-item bibliography. (PAA)

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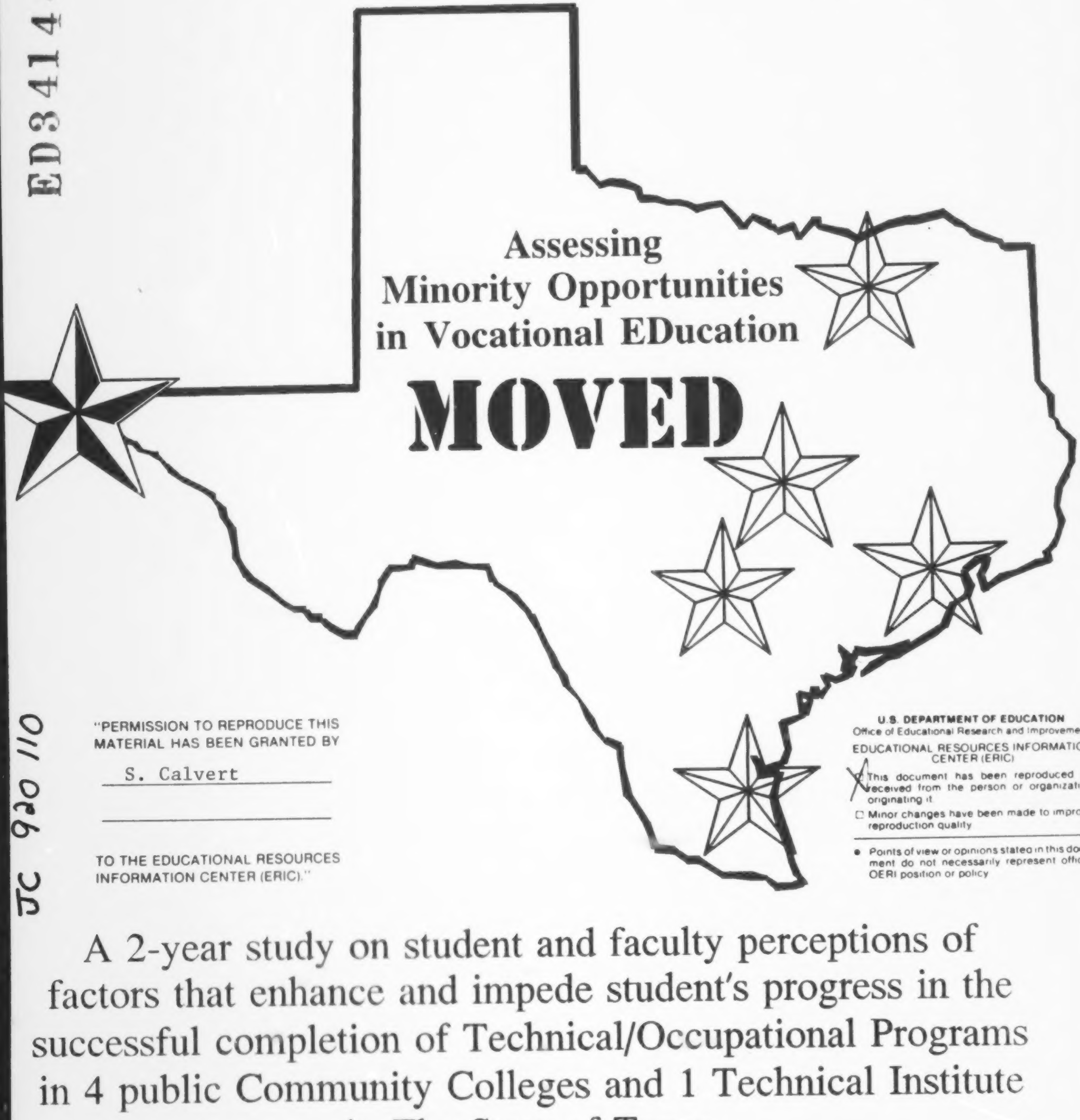
# El Paso Community College presents

# A Research Report



# Assessing Minority Opportunities in Vocational EDucation

# MOVED

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A 2-year study on student and faculty perceptions of factors that enhance and impede student's progress in the successful completion of Technical/Occupational Programs in 4 public Community Colleges and 1 Technical Institute in The State of Texas.

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# El Paso Community College

# Assessing Minority Opportunities in Vocational Education

## A Research Report

A 2 year study on student and faculty perceptions of factors that enhance and impede students progress in the successful completion of Technical-Occupational Programs in four (4) public community colleges and one (1) technical college in the State of Texas.

June 1991

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# TABLE OF CONTENTS

page

ACKNOWLEDGEMENTS ii
SECTION I. INTRODUCTION 1
SECTION II. REVIEW OF ISSUES 2

- A. Work Force
- B. Student Retention
- C. Student Retention Factors
    - 1. Counseling and Advising
    - 2. Testing and Placement
    - 3. Financial Aid
    - 3. Academic Assistance
    - 4. Student Attitudes
    - 6. Faculty Impact
    - 7. Community Involvement
    - 8. Institutional Commitment

SECTION III. MOVED PROJECT 15

- A. Abstract
- B. Definitions
- C. Methodology
- D. Faculty Results
- E. Student Results
- F. Comparisons and Contrasts

SECTION IV. CONCLUSIONS AND RECOMMENDATIONS 40

- A. Demographics
- B. Faculty
- C. Students
- D. Student Services

SECTION V. BIBLIOGRAPHY 48
SECTION VI. APPENDICES 51

- A. Preliminary Survey
- B. Pilot Faculty Survey
- C. Minority Faculty Survey
- D. Non-Minority Student Survey
- E. Comparisons Table: Reasons Students Enter Programs
- F. Comparisons Table: Qualities of a Good Instructor
- G. Comparisons Table: Why Students Will Complete (Students)
- H. Comparisons Table: Why Students Will Complete (Faculty)

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# INTRODUCTION

In the Fall of 1989, the **Texas Higher Education Coordinating Board** authorized a Carl Perkins discretionary funds grant to El Paso County Community College District. The project called **Assessing Minority Opportunities in Vocational Education (MOVED)** was to compile and analyze data from minority student and faculty regarding their perceptions of those practices of community and technical colleges that enhance and or impede technical-occupational student completion rates.

The grant project goals were to: 1. Design and implement a comprehensive statewide assessment, using sound research techniques and statistically validated survey instruments, of the perceptions of minority faculty and students currently in technical-occupational programs concerning existing services and resources to meet special or unmet needs or other factors that may impact their ability to continue in the technical-occupational field; 2. Identify factors which impede the continuation of minority students in technical-occupational education through detailed analysis of survey data as well as in-depth interviews of potentially non-continuing students; and 3. Formulate recommendations for changes in approaches to delivery of services and resources, which could affect the State Master Plan for Vocational and Technical Education, utilizing research data and technical expertise state wide. The second year of the study added comparisons to White non-Hispanic faculty and students to first year data, which is included in this report.

The MOVED research design was developed in three stages after extensive search of current literature on the subject as follows: 1. An open-ended questionnaire was developed and administered at El Paso Community College (EPCC); 2. Pilot surveys were designed based on the results of the questionnaire and administered to minority technical-occupational students and faculty at EPCC; and 3. The final survey instruments were based on the two prior survey instruments and their results. The final surveys were distributed to minority technical-occupational faculty and students at five selected community and technical colleges in varied geographic locations of Texas. Slightly modified surveys were administered to White non-Hispanic technical-occupational students and faculty at the same colleges the second year of the study. The factors that were analyzed will be discussed in subsequent sections. The completed study provides the database and key factors which will strengthen the technical-occupational higher education opportunities for the minority population in Texas to the year 2000. The results represent the major portion of this report. Comparisons and contrasts of all responses were analyzed using several statistical methods and provide interesting results.

Recommendations, the pivotal function of this project, provide appropriate suggestions that can be implemented by the Texas State Legislature; Texas Higher Education Coordinating Board; and/or community and technical college administrators, technical-occupational faculty and counselors. The project staff worked with an Advisory Committee and with technical-occupational education professionals from throughout Texas to meet the objectives of MOVED.

# REVIEW OF THE ISSUES

> ***Minds are like parachutes -- they only work when they're open. The government and citizens of the United States are going to have to keep their mental parachutes wide open to respond effectively to the challenges that lie ahead. (Cetron, Rocha, and Luckins, 1988)***

For all of us, those challenges lie in the ability of technical-occupational education in Texas colleges to maintain the pace set by the changing needs of the work place environment. By the year 2000, it is projected that 75 percent of those entering the Texas work force will be Black, Hispanic, and women. Technical-occupational education must play an important role in the preparation of the work force for the 21st Century.

The contents of this report represent a compilation of current research, writings in the area, and results from the MOVED project. Where applicable, it also incorporates information about current model programs in retention and successful completion efforts of minority students in occupational-technical programs. Consequently, this document illustrates the need for the design and implementation of a comprehensive technical-occupational higher education system in Texas that addresses the needs of the Black and Hispanic populations of the state.

## THE WORK FORCE

Based on changing socio-economic and demographic conditions in the state of Texas, current predictions are that by the year 2000 the state will require a more technical, mobile and higher educated work force. By the year 2000, Texas can also expect a greater number of minorities and females in the work force (Texas Work Force 2000, 1989). No issue is more critical than establishing effective methods for the technical-occupational education system in order to strengthen its ability to provide a solid education for these individuals. The role minorities and women play in the future work force is vital in the continuing economic development of Texas.

Nationally, about half of all service workers will be involved in collecting, analyzing, synthesizing, structuring, storing, or retrieving information as a basis of knowledge by the year 2000. By 1995, 80% of all managers will be knowledgeable workers. Between 1980 and 1985, 41.7% of the U.S. population moved and occupation mobility will increase as more people retrain for new careers. People will change careers, on average, every 10 years. A lack of commitment to one specific job is illustrated by the results of a recent poll: Only 39% of workers say they intend to hold the same job five years from now. The rapidly changing job market, with the changing requirements of new technologies, will necessitate increased training across the board. Up to 4% of the labor force will be in job retraining programs in the 1990's. Because of fundamental changes in the economy, there will be fewer and fewer well-paying jobs not requiring advanced training. Approximately 63% of new entrants into the labor force between 1985 and 2000 will be women. Black workers made up 10.7% of the national civilian labor force in 1985, up from 9.9% in 1975; by 1990, that number will have risen to 11.1%, reaching 11.5% by 1995. Hispanic workers made up 6.7% of the national civilian labor force in 1985, up from 5.7% in 1980; the number is expected to rise steadily. (Productive America, 1990)

Between 1979 and 1985, 1.7 million manufacturing jobs disappeared in the United States. Agriculture, mining and construction continue to decline as a percent of the labor force. By 2001, manufacturing productivity will have increased 500% in those industries that have become more automated, added robotics, and remained flexible in their production methods (Productive America, 1990).

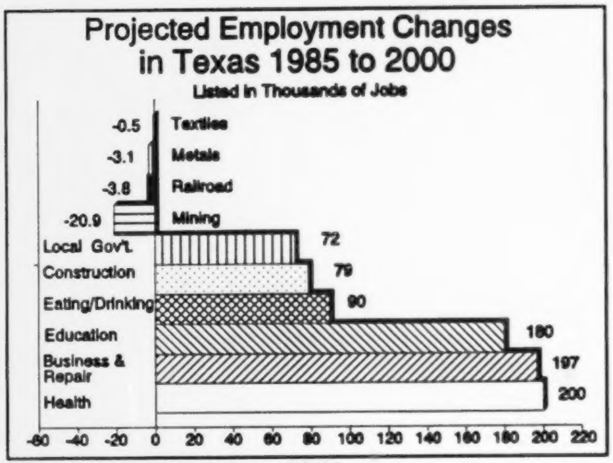


*Figure 1 Source: "Work Force 2000".*

According to data compiled by Texas Employment Commission's **Texas Work Force 2000**, the increase in the Texas work force between 1985 and 2000 is projected to be 2,276,800. ***Figure 1*** shows the projected changes in the Texas job market between 1985 and 2000, with a net increase of 789,700 jobs in these areas. Of the new jobs projected, 94% will be in service oriented occupations. This will have an impact on technical-occupational higher education program planning immediately, and well into the 21st century. If technical-occupational educators are to prepare students for a changing job market and keep Texas competitive into the next century, they must consider this factor carefully in curriculum and course development and institutional planning, in addition to the rapid technological advances that are seen in each of the individual occupational specialties.

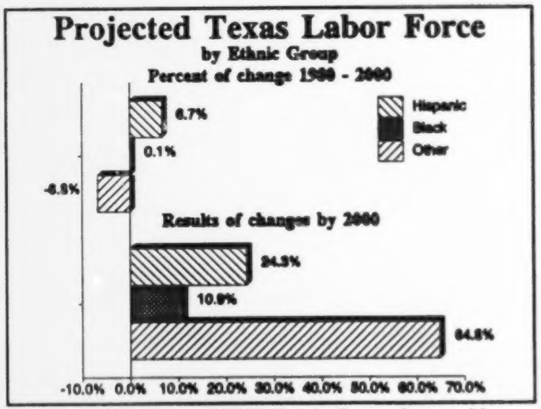


*Figure 2 "Work Force 2000" Ethnic Group Composition.*

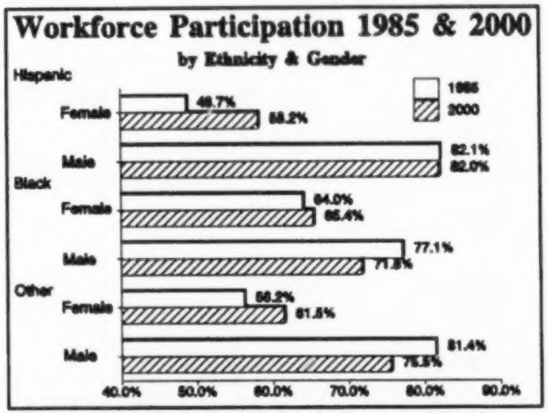


*Figure 3 "Work Force 2000" Ethnic Group and Gender.*

The demographics of the Texas work force are changing at a rapid rate at the present time and will continue to change at a more rapid rate into the approaching century. ***Figures 2 & 3*** demonstrate some of these expected changes. The net result is a 7% shift from White Non-Hispanic's proportion of the total work force to Hispanic and Black representation in the labor pool. Participation in the civilian labor force is projected to fall by 4.3% for all males, between 1985 and 2000. During the same period, it is expected to climb from to 61.3% for females, led by Hispanic females with a 20% increase as they approach participation at a rate similar to that of females in other ethnic groups.

As the total work force shifts, there are modifications that are of specific interest. ***Figures 4 & 5*** are an estimate of the demographics of Texas from which most of the community college students will be drawn.

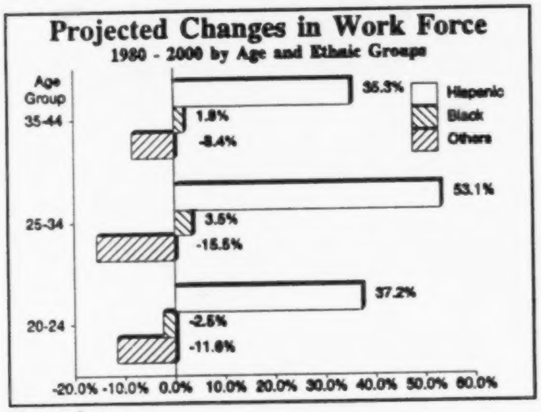


*Figure 4*

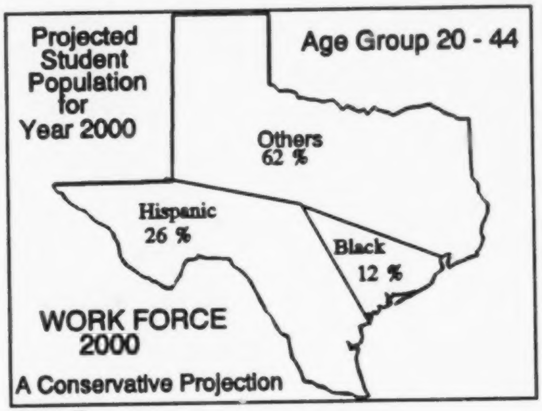
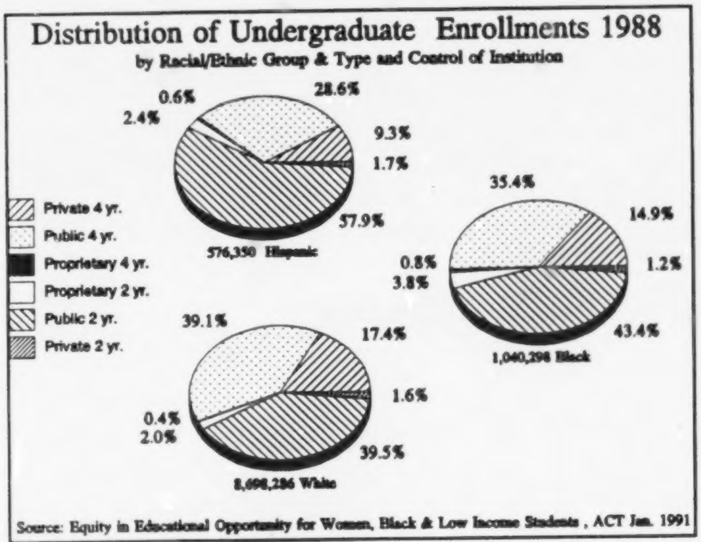

Projected Student Population for Year 2000
Age Group 20 - 44
Others 62 %
Hispanic 26 %
Black 12 %
WORK FORCE 2000
A Conservative Projection

*Figure 5*

Over 80% of respondents to the MOVED survey fell within the 20-44 age group. Over 60% were within the 25-34 year age group. Only 5.4% were younger than 20 years. Comparing these figures to work force participation (***Figure 3***) indicates that women, who make up 55% of both the minority and non-minority populations at the six colleges, will probably continue to be the majority of technical-occupational students as they as they seek to increase their participation in the work force. There will be a particular need for Hispanic females to receive the skills needed to compete in the job market in increasing proportions

## MINORITY STUDENT RETENTION

Expanded minority student enrollments in community colleges have not necessarily been reconciled by increased retention and transfer rates to senior institutions (Rendon and Nora, 1989). Minority student success in technical-occupational programs in higher education is becoming a great concern to educators and administrators. Although this study is limited to technical-occupational students in Texas public community, junior and technical colleges, national trends are important in looking at the entire picture of education. The following current data and their implications have


Distribution of Undergraduate Enrollments 1988

by Racial/Ethnic Group & Type and Control of Institution

Source: Equity in Educational Opportunity for Women, Black & Low Income Students , ACT Jan. 1991

*Figure 6 Adopted from Conciatore 1991*

had an impact on Texas, as well as the nation as a whole. Nationally,Mexican-Americans have a completion rate from high school of less than 50% compared to about 70% for other Hispanics. This can be compared to 82% for Blacks and 84% for Whites. "In 1989, less than 40% of Mexican-Americans who graduated from high school enrolled in college, compared to about 60% of other Hispanics." (Conciatore, 1991) This is important since over 90% of the Hispanic students who responded to this survey were Mexican-American. ACT's study found that 10% of the Mexican-Americans between the ages of 25 to 29 and who had entered college had graduated (Conciatore, 1991). The MOVED study indicates that while Mexican-American females may enter at a younger age, that the bulk of student respondents had entered at a more advanced age. As ***Figure 6*** points out, 61% of all Hispanic students are enrolled in two year institutions as opposed to Blacks at 48% and Whites at 42%. Although the data are not available at this time, it is safe to speculate that the percentage of Mexican-Americans in Texas' two year institutions is even higher.

## STUDENT RETENTION FACTORS

> ***Retention research over the past fifty years has not been productive for the most part. We haven't learned anything new and we haven't used what we know. Yet we continue to "conclude" that further research is needed (Cage, 1976).***

Tinto (1975, 1987) defended long range studies as "important to understanding why students do not complete a program of study." The following sections provide more concise descriptions of the factors that will enhance or impede student success in technical-occupational programs. Tinto's 1987 model showed six different variables that related to reasons why students drop out from college. Those variables are as follows:

1. Background characteristics
2. Initial goal and institutional commitments
3. Academic and social integration
4. Subsequent goal and institutional commitments
5. Intention to persist
6. Withdrawal decisions

Dr. Juan Lara of the Thomas Rivera Center in California is quoted as saying, "The reason recruitment and retention programs are failing African Americans, Native Americans and Latinos is that they were designed 20 years ago." He goes on to say "The dearth of minority students in the educational pipeline is the continued use of programs that were OK in the '60s and '70s but inadequate for the '90s." (Rodriguez, January 31, 1991).

There have been many models used to identify and analyze those factors that have caused students to leave certified technical-occupational programs. The more original and comprehensive designs were developed by Tinto, Meese and Spano, and Astin. Astin (1988) offered the following guidelines for insuring student retention:

1. Academic Preparation (high school grades, aptitude test scores, study habits, secondary school curriculum and perceived need for tutoring)

2. Demographic Characteristics (sex, age, parental income, parental education, parental occupation and racial composition of high school); It should be noted here that, except for recruitment purposes, the institutions have literally no control over these factors. The data cannot be changed in order to improve the conditions that determine student success.

3. Career and Study Plans

4. Other Student Characteristics (self-concept, attitudes, smoking): and 5. Environmental Factors (institutional characteristics, field of study, financial aid and place of residence.

Halpin (1990) stated that "Individuals enter institutions of higher education with varying background attributes and experiences, as well as varying personal educational achievement expectations and initial levels of affinity for the institution." It is important for individual institutions to understand their student populations in order to effectively evaluate their programs and to provide adequate assistance.

In consideration of the preceding comments, the following factors have been outlined, within the framework of the MOVED project, regarding the minority students and faculty perceptions of reasons for success (completing or leaving a program) in the community and technical colleges:

1. Counseling and Advising
2. Testing and Placement
3. Financial aid (grants, scholarships, loans, work-study programs and job placement programs)
4. Academic Assistance (tutoring)
5. Student Attitudes versus Faculty Attitudes
6. Faculty Involvement
7. Community Involvement
8. Institutional Commitment

Student persistence in higher education has continued to be of great interest both from the viewpoint of scholarship and administration policy for decades (Pascarella, 1986; Nelson, 1989; and Halpin, 1990). The problem of minority success in technical-occupational programs is even more important to leaders in the higher education sector in light of the fact that "employment will stagnate or dwindle in many occupations that require little formal education... more and more future job openings will require higher levels of skills development either in secondary programs or beyond high school, but short of a bachelor's degree" (Hobbs, 1990).

## COUNSELING AND ADVISING

This is the cornerstone of students' involvement with the institution. A recent article (Henry, January 1991) talks about faculty advising for Black students. She states:

> ***This student/faculty interpersonal encounter sets the stage for students' perception of the university as supportive and caring or hostile and cold. A students survival depends on the development of a close and sensitive relationship between academic advisor and student.***

It is aligned with the assessment procedures that insure the students' proper placement regarding remediation and the planning for meeting the criteria of each program.

Student support from counseling cannot be understated. Cage (April, 1989) cites Hollander's concerns that "Initially, we thought that the issue of minority access was recruitment. We quickly found that was insufficient. Students need much more support than we anticipated." Tinto (1982) believes that student attrition is "almost always integrally tied into the admission process." Counseling and advising is a part of that process.

## TESTING AND PLACEMENT

Community colleges have "open door" policies. Kanter (1990) states "Students are not admitted as much as they are placed into courses as a result of assessment and directed into various levels of the community college curriculum." Furthermore, she says, "Many of the technical-occupational programs do require prerequisites." Testing and placement have changed so that students are assisted rather than impeded in their goals. It is also an important aspect for the purposes of counseling. Astin (1988) found that "SAT and ACT results do not necessarily predict student success, though ...tests can guide new students and help counselors place them in courses appropriate to their particular level of academic development." Astin also states that...

> ***In effect, such a practice seeks to remedy academic deficiencies rather than to force students to accept such deficiencies as irremediable; it does not impose limits on their future educational options. Clearly, the educational interests of minorities will be greatly enhanced if this practice becomes more widespread.***

Taube and Taube (1990) concluded that "placement tests in Math, English, and Reading can assist the student in preparing for the technical-occupational programs. They ...help to ensure that students at least possess the basic skills necessary for program completion, which might in turn reduce student attrition rates and subsequent student loan defaults."

Since the student will need to adapt quickly to new workplace demands, they, as employees must know how to learn. They need problem-solving skills to overcome barriers that arise in new situations...(Carnavale et. al. 1989) it becomes imperative to assess the students' abilities before they enter the technical-occupational area of their choice so that they may have a greater promise for success.

## FINANCIAL AID

Financial aid involves grants, scholarships, loans, and even work-study programs. They play a crucial role in the students' quest for fulfilling their career goals. Tinto (1982) claims that there is "not sufficient emphasis to the role of finances in student decisions concerning higher education persistence." Furthermore he states that:

> ***For most students, the question of financial costs occurs within the broader context of costs generally and the character of their educational experiences within a specific institution in particular. When students' experiences are positive, they are more likely to accept greater financial burdens in order to continue attendance than when experiences are unsatisfactory.***

There are many advocates for greater federal spending for education. An annual $5 billion increase in federal spending is needed for programs such as the Head Start preschool program, federal aid for disadvantaged children, Job Corps, and the Job Training Partnership Act. Two-year colleges and associate degrees will continue to grow. A recent quote of Education Secretary Lamar Alexander, during Congressional hearings gives some indication of this when he stated "community colleges are part of the American education success story.....the rapidly expanding community college systems are very good systems (Reinhard and Hendley June 18, 1991). Loans rather than grants will constitute the main source of student financial aid at the college level. Greater emphasis will be placed by the public and the legislatures on the outcomes of public education.

Nora (1987) concluded that "insufficient financial resources have an influence on Hispanic attrition." (Astin 1988) postulates that:

> ***financial aid programs have had a positive effect on minority participation in higher education. Work-study programs appear to facilitate student persistence, provided that the work is part-time (less than 20 hours per week) and (preferably) located on the campus.***

Astin also found that "working more than twenty hours per week "negatively influences undergraduate persistence." Funds for child care also ... reduce barriers to access for some students... (Community College Week, April 30, 1990).

Conciatore (February 1991) quotes Tom Mortenson, who conducted research studies for American College Testing (ACT), made four suggestions for congressional consideration Two of them apply specifically to financial aid:

1. Work study programs should be the "cornerstone" of financial aid programs, because they begin "the process of social integration into the academic community", which is necessary for student retention; and

2. Grants should be given to needy first year students, not loans, citing data that shows that most students who default on student loans do so in the first year.

The justification for providing financial assistance is evident, but as T. Edward Hollander, chancellor of the New Jersey Board of the New Jersey Board of Higher Education says, "If we don't deal with the **total environment** in which students study, simply removing economic obstacles just provides a revolving door" (Cage, 1989).

## ACADEMIC ASSISTANCE

Assistance (tutoring and developmental studies) with academic work is crucial for minority success. Richardson (1989) stated in a report that: "Black and Hispanic youth have reading and writing skills substantially below those of Anglo children and are far more likely to drop out of school, especially in the inner cities."

The TASPP (Technical Assistance for Special Populations Program) Brief suggests the following: The TASPP Brief (as conceptualized by researchers Norton Grubb and Jane Plihal) Brief Stage 1 recommendation favors: "requiring more academic course work of vocational students, or establishing academic prerequisites before taking vocational sequences." It also recommends incorporating academic skills in existing vocational courses. This can be done either by including basic skills modules, taught either by vocational or academic teachers, or by including modules on problem solving, critical thinking skills, and other higher-order abilities.

Peer tutoring as well as faculty support and assistance is believed to be important. An article in Community College Week by Morgan (February, 1990) quotes Hence:

> ***A lot of minority students have aspirations but don't have plans. Many are the first generation to attend college and really want to achieve but need encouragement. It becomes the responsibility of African American (sic minority) professionals in these colleges to grab onto these students and help them achieve their dreams.***

Tutoring and peer support are discussed further in the MOVED project results.

## STUDENT ATTITUDES

What students feel about their environment is going to affect how they perform in the institution. Yet Astin (1988) found that:

> ***The student's initial choice of a career or major is not a random event, and that it has considerable influence on the student's long-range career development...in other words, the minority student's initial degree aspirations are found to be consistently related to their actual degree attainment.***

Understanding student attitudes offer insights that can assist institutions in their quest for ensuring student persistence. Tinto (1982) reminds us that there are "academic dropouts and voluntary withdrawals." Each institution and all studies performed should reflect those differences. Thus we can improve our understanding as well as our programming in order to account for those types of attrition. For example, Brint and Karabel (1989) postulated that "In a community college, interests in jobs, dating, and family responsibilities ... are often the prevailing concerns."

Meese and Spano (1989) suggested five important determinants for student success:

1. External barriers (child care, transportation, living expenses, and identification with the individuals or groups on campus)
2. Attendance
3. Effort and motivation
4. Basic skill development
5. Institutional values (nurturing commitment).

In a study by Brigman, Kuh, and Stager (Spring, 1982), students who dropped out ranked nine items as significantly more important in their decision to exit... They were as follows:

1. Uncertainty or indecision about career choice
2. Opportunity for full-time employment
3. Inadequate financial aid
4. Ineligible for financial aid
5. Dissatisfaction with personal achievement
6. Personal adjustment problems
7. Change in financial support from family
8. Change to non-college vocation
9. Lost financial aid.

Of the nine items, uncertainty about career choice, dissatisfaction with personal achievement, and personal adjustment problems relate to their attitudes.

## FACULTY IMPACT

The ethnic composition of the faculty is also assumed to be important. The Education Department, in a 1988 tally, found that more than 90 percent of the faculty at the nation's public two-year institutions were white (Wiley, 1990). Cage (1989) notes that:

> ***Because of the structure and the uniqueness of the clientele at two-year institutions, the need for minority faculty at those college are even more pronounced than at other institutions. Therefore, states need to put more money into the hiring of minority faculty. If there is a supportive environment, minority kids can turn their interest to academics.***

Felipe de Ortega y Gasca (1990) complains that the situation in Texas institutions "is deplorable." Furthermore, he states that "on balance, the ratio of Hispanic faculty at Texas public community and technical colleges is distressingly disproportionate to their numbers in the state population."

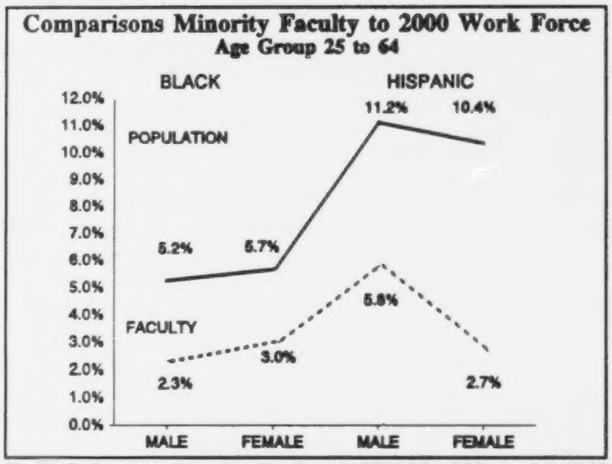


***Figure 7** Sources: Coordinating Board (CBM 004-008) for fall 1989 as revised 5/30/90 & "WORK FORCE 2000"*

The technical-occupational programs in Texas' public community, junior and technical colleges do not have faculty demographics that match those of the State. ***Figure 7*** is a comparison of minority faculty currently teaching in Texas with the projected work force between the ages of 25 and 64 for the year 2000. To implement balance with the work force, as stated in objective d of Goal 4 Master Plan for Vocational and Technical Education 1991 Update, which states "To have technical education staff representative of the student population of in Texas". In order to accomplish this, community, junior and technical colleges would require an increase in the number of minority faculty by 1316 over the present level over the next nine years. This would be a 135% increase over the current 977 to 2293 minority faculty. These figures do not account for any increase in the existing total of 7055 full and part time faculty. The greatest disparity between faculty and the work force is among Hispanic females whose numbers will need to be increased by 285% to reach parity. Black females currently outnumber Hispanic females on Texas technical-occupational higher education faculties. Hispanic females outnumbered them by over 33,000 in the 1980 work force. This may be in part due to the Hispanic females traditionally lower participation in the work force (see ***Figure 3***), but this was taken into account in the data. These figures would be even more elevated if the student population were used which would call for a 38% minority faculty, rather than a 31.5% when faculty age groups were considered (see ***figure 5***).

Some information has been found regarding the impact of instructor attitudes as a major factor in student persistence. Halpin (1990) noted that "faculty concern for teaching and student development, intellectual development, and interaction with faculty" actually predicted student persistence levels. The evidence shows that student interaction with faculty will create a higher persistence level for the student. Halpin (1990) lists the following determinants that will "result in greater levels of integration and hence persistence": Small, interactive classes; Numerous office hours; Active developmental academic advising systems; Mentoring and small group learning projects; and A generally accessible, involved faculty. There is further research evidence suggesting that interventions providing faculty advising, developing supportive peer groups, generating academic support systems, and initiating orientation programs can positively influence student retention (Pascarella, 1986).

## COMMUNITY INVOLVEMENT

Community colleges are the community and should serve the community. Clowes (1989) believes that: "assistance from the various community service organizations, businesses, and political apparatus will make the students's time spent in pursuit of a goal more relevant .....career education as the core function would provide a solid base for restructuring. Linkages with secondary schools are already in vogue and concentrate around career education".

Past and present students, through their community college learning, support and develop local communities. Precise indicators, such as voting levels as one civic responsibility measure, must be chosen to match a college's values and secondary intentions (primary intention being direct education) in serving its community (TASPP).

Hispanic students are disproportionately affected by poverty and unemployment. Many live in communities where socio-economic conditions have so deteriorated that there is no incentive to go to college because available jobs do not require a college degree....To this end, community colleges must build coalitions with the community, parents, business and industry, school districts, political figures, and other influential community members. These coalitions must mount a concerted effort to raise community awareness about the importance of attaining a college-level education so that Hispanics may be competitive in a labor market that increasingly requires workers to think. (Rendon and Taylor, December/January 1989-90).

## INSTITUTIONAL COMMITMENT

An early study by Bean (1980) found that "institutional commitment, institutional quality, routinization, satisfaction, and communication were the major factors for student completion." Institutional commitment and environment are important considerations for generating and supporting policies and methods for productive student development.

Tinto (1982) suggested that "some students may find the academic and social communities of a campus unsuited to their tastes." It is the students' interaction with the social system that most strongly affects institutional commitment and, subsequently, persistence (Nelson, 1989). Illinois State University's Mr. Morris in an article of the Chronicle of Higher Education (April 12, 1989) stated that the "isolation that minority students feel on predominantly white campuses is a deterrent to their academic progress. What minority students need is really no different from what the white student needs. They need a support system."

Tinto (1982) believes that "dropout and persistence are both reflections of the functioning of the higher educational system." It is clear the various institutions must commit to the student if they want to assist them in their survival. Nora's 1987 study found that the "strongest effect on Hispanic student retention in community colleges was institutional/goal commitments." Furthermore, she found "high levels of congruency between students and their environments lead to high levels of credential attainment, hours earned and goal satisfaction. Pascarella (March, 1988) believed that the following factors were important in encouraging student persistence:

1. Involvement in extracurricular activities
2. Close friends and peer support
3. Frequency and quality of student-faculty interaction
4. Quality of academic programs and courses
5. Participation in the institutions's academic life and special academic programs
6. General level of student involvement in the institution

"An institution cannot begin to ameliorate the problems associated with poor retention efforts unless it is willing to ask and address critical questions, some of which will demand structural change....Among the strongest historical explanations are the following:

1. The political expediency of retaining the status quo; the inability to hold accountable decision makers who lack vision courage and retention-related skills

2. The perpetuation of the privileged position of the group(s) in power

3. The tendency to maintain a dichotomy between academic affairs and student affairs

4. The tendency to utilize traditional retention programs and strategies which have proven to be ineffective

5. The failure to include the general faculty as part of the retention effort; the tendency to operate by either stereotypical assumptions about students from diverse populations or by Eurocentric emphasis upon which strategies are most valued

6. The tendency to initiate retention efforts which are responses to crisis or symptoms rather than well-planned, intrusive and proactive efforts

7. The tendency to utilize singular methods of assessment, which tend to be cognitive indicators, to determine both entry and placement for diverse students.

Any type of substantive change within an institution begins with a comprehensive systematic assessment of retention and diversity, and such an introspection must be objective, honest, purposeful and willing to confront tough social/political issues if they exist" (Anderson, January 1991).

Institutional effectiveness must be measured through evaluation procedures that would include but not be limited to involved faculty, administrators, students and community organizations and businesses that ultimately hire the students. The individual institution holds the key to the success of any program. Bureaucratic indifference must give way to humanistic management approaches that improve the attitudes of the students as well as faculty, administrators, counselors, and other support personnel.

It is the institution's responsibility to provide the environment that will help the students achieve their educational goals. Pascarella (March, 1988) mentioned three important areas that lead to effective institutional policies. They include:

1. A coordinated program of ongoing research
2. Policy development
3. Evaluation that involves key personnel throughout the institution.

Altieri's (1990) Structural Model for Student Outcomes, and the TASPP (Technical Assistance for Special Populations Program) Briefs describe models what could address the problems associated with student success. The student outcome categories as outlined by Altieri. Knowledge or Skill Attainment are examined through units of study represented most frequently at the course, workshop or seminar levels. DACUM (Developing **A Curriculum**) analysis can "have direct implications for the knowledge and attitudes that workers must have in order to perform the tasks correctly". This information "provides the means for systematically developing data-based education and training programs" (Centergram, June 1990).

Career Success/Advancement employment outcome addresses employability, career performance, or job advancement of current or former students. Community and Technical Colleges in Texas should commit themselves to improving the institutional climate of their schools for minority students by: "giving way to humanistic management approaches that improve the attitudes of the students as well as faculty, administrators, counselors, and other support personnel" (Centergram, June 1990).

# MOVED PROJECT ABSTRACT

The major premises of this study are: 1. Racial/Ethnic Group minority students are successfully completing technical-occupational, higher education programs at a rate lower than that of non-minority students. 2. There are certain factors Texas' community, junior and technical colleges have control over that would improve the success rate among minority students in those programs. Upon extensive review of the current literature and consultation with the Advisory Committee, an open ended survey was developed to provide input from minority faculty and students as the basis for a survey instrument to determine those factors. From this preliminary study an instrument was developed and tested in a pilot study. The instrument was further refined based on the results of that study. The survey instrument was then distributed to 360 minority faculty and 2439 minority students in five colleges in Texas based on faculty demographics exhibiting a majority of the minority faculty concentrations and varied geographic areas of Texas. These were analyzed and in the second year of the study, slightly modified surveys were distributed to 565 White non-Hispanic faculty and 2322 White non-Hispanic students at the same institutions. This is a report on the detailed descriptive analysis of the total data, and recommendations regarding our findings.

## DEFINITIONS

**Accessibility:** Not only providing access to entry into the technical-occupational programs in the colleges, but also "access to success" or enhancing completion rates in the student's chosen program. This will include implementation of the recommendations to assure that students complete their program and become practitioners in their chosen field

**Community, Technical College or College:** The six schools that were chosen for the study

**Coordinating Board:** The Texas Higher Education Coordinating Board, Community and Technical Colleges Division

**Minority:** African American race or Hispanic ethnic origin. In the survey the Racial/Ethnic groups were broken down to Mexican-American, Puerto Rican-American, Cuban-American, Central/South-American, Black-Hispanic and Black-non-Hispanic. Less than 10 percent of the responses were other than Mexican-American or Black and are included under the Hispanic

**Other/s:** Refers to all those persons who are not Black or Hispanic, including Anglo or White non-Hispanic, Asian-Pacific Islanders, Native Americans and Alaskan Natives

**Technical-Occupational Faculty or Faculty:** Those faculty who currently teach at least one full semester college credit technical-occupational higher education course, at the colleges surveyed, as reported on the Fall 1989 Coordinating Board CBM 004-008

**Technical-Occupational Student or Students:** Those students who were enrolled in at least one full semester college credit technical-occupational higher education course, at the colleges for the semester surveyed, as reported on the Coordinating Board CBM 004-008

# THE MOVED PROJECT

## OVERVIEW

The MOVED (Assessing Minority Opportunities in Vocational EDucation) Project provides a foundation and structure that will strengthen technical-occupational education opportunities for the diverse population of Texas to the year 2000 and beyond.

The MOVED Project was divided into two parts, Phase I and Phase II, each of which encompassed one year. Phase I of MOVED included three major goals:

1. To design and implement a comprehensive state-wide perspective assessment of minority faculty and students currently in technical-occupational programs
2. To identify those factors which impede the continuation of minority students in technical-occupational education through detailed analysis of survey data as well as in-depth interviews of potentially non-continuing students
3. To make recommendations for the State Master Plan for Post-secondary Technical, Vocational, and Adult Education concerning the delivery of services and resources by Texas institutions utilizing research data and technical state-wide expertise

Phase II of the MOVED project had three major goals:

1. To disseminate the results of Phase I of the project through state-wide and national forums
2. To enhance the impact of the MOVED I project results and implications through a tele-conference which included the participation of technical-occupational minority students and faculty
3. To complete a comparative study of minority and non-minority students and faculty using a modified version of the original Phase I project survey instruments

## METHODOLOGY

The MOVED research design was developed in three stages:

1. An open ended questionnaire was carefully designed to provide information from students and faculty concerning their perceptions of those factors that the college provides that enhance the student's chances of completion of his/her technical-occupational program (see Appendix A).
2. This survey was administered to 125 students in a controlled situation, as a preliminary study. From results of that study, pilot surveys (see Appendix B for sample survey) were designed and administered to minority technical-occupational students and faculty at El Paso Community College.
3. The final survey instruments (see Appendix C for sample survey) contained 101 variables in nine categories, were based on the previous survey instruments and their results.

The nine categories were:

1. Demographics
2. Reasons students enter program
3. Basic skills assessment
4. Satisfaction with remediation programs
5. Satisfaction with college/program services
6. Qualities of a good instructor
7. Financial aid programs
8. Special student services
9. Reasons students will finish program

Each item, except "Demographics", which used standard category groups and "Basic skills assessment" which was "Yes" or "No", was given a five point Likert scale for rating as either:

1. Very Poor
2. Poor
3. Average
4. Good
5. Very Good

A second scale of either:

1. Not necessary
2. Not very important
3. Important
4. Very Important

5. Essential

was appropriate for other items. Room was given at the end of each category for "Other" items, which were to be specified. A page was provided for comments on each survey.

The five schools that were chosen for the final study were selected on the basis that their faculties (along with EPCC), represented nearly 50% (474 of 977) of the minority technical-occupational faculty in the State of Texas, based on Texas Higher Education Coordinating Board data (CBM 004-008). These colleges also had nearly half of the Black and half of the Hispanic faculty in the state. They represent varied geographical areas of Texas north, central, the far south, east and far west Texas. Each College was given a letter to designate it in the final report to provide anonymity. The same instruments with slight modifications were administered to White non-Hispanic technical-occupational students and faculty at the same colleges the second year of the study.

When the minority survey instruments were completed, administrators in all the five colleges were contacted, in person, by phone or through an Advisory Committee member. Arrangements were made to have the surveys distributed to each minority faculty member through that college's normal distribution system. The faculty member returned them to an administrator at each institution, who returned them to the MOVED staff. The same method and same administrator was used the next fall for the White non-Hispanic faculty. By this method, a greater than 60% response rate was obtained.

Complete enrollment lists of all Hispanic and Black students, currently enrolled in a semester long college credit technical-occupational course, was obtained from each college selected for the study. These lists contained (in ASCII Format) the first name, middle initial, last name, gender, racial/ethnic group, each colleges major code, home address, city, state, zip and home phone. Each list was then entered in a data base and sorted by racial/ethnic group and gender to determine the exact proportions of each. These figures were recorded and then the list was sorted again by address and those without addresses were eliminated. The list was then sorted a third time by declared major code, racial/ethnic group, gender and first name in order to obtain a stratified group that was as random as possible. The total number of students was then divided by 500, the number of letters sent to each student population with the expectation of getting 100 responses per school. An additional code field was then added to each record. Starting with the second or third record, each list was then reduced to 500 by adding a number in the code field, skipping the appropriate number of records in the list. These records were sorted and then matched with the figures from the total population for gender and racial/ethnic group. If the figures were not in complete percentage agreement with the original, the list was modified by deleting or adding the appropriate number using the same method but starting from the third record from the end of the list until the missing gender and racial/ethnic group records were found. Letters and the surveys were then mailed to each individual student at his/her home address. This method did not allow for follow-up on the surveys because of budget constraints. This was the reason for the large number of original letters. The surveys were all color coded to identify which of the colleges the responses were returned from. The same method was used for the White non-Hispanic students.

## DATA AND ANALYSIS

The data from the 566 faculty and 1005 student responses were coded by single digit and entered into an ASCII format with 105 variables (record number, college and status were added). A program for analysis was written in Statistical Package for the Social Sciences (SPSS) which read the encoded data. Several descriptive statistical evaluations were applied to the data, including parametric and non-parametric measures, percentages, cross-tabulation problems, analysis of variance, Chi square and Kendall's coefficient of concordance.

This report is a descriptive analysis of responses to the MOVED Project survey instruments by technical-occupational students and faculty in selected Texas community and technical colleges. The observations about some of these results are based on an extensive review of the literature and in consultation with experts in the field of technical-occupational education from throughout the state of Texas.

# FACULTY RESULTS AND OBSERVATIONS

The data reflect the majority of the faculty polled. Response rates for the various colleges were different as demonstrated in *Table 1*.

**FACULTY RESPONSES BY COLLEGE**

| | Minority | | | White non-Hispanic | | |
|---|---|---|---|---|---|---|
| | N | n | % | N | n | % |
| College A | 92 | 80 | 86.96% | 66 | 46* | 69.70% |
| College B | 68 | 51 | 75.00% | 99 | 41 | 41.44% |
| College C | 54 | 15 | 27.28% | 100 | 47 | 47.00% |
| College D | 32 | 25 | 78.13% | 100 | 49 | 49.00% |
| College E | 114 | 53 | 46.49% | 200 | 159 | 79.50% |
| TOTALS | 360 | 224 | 62.22% | 565 | 342 | 60.53% |

*Table 1 (N) = Population (n) = Responses (%) = Response rate NOTE: * Six surveys were not counted because the faculty taught basic introductory courses outside the occupational areas.*

## DEMOGRAPHICS

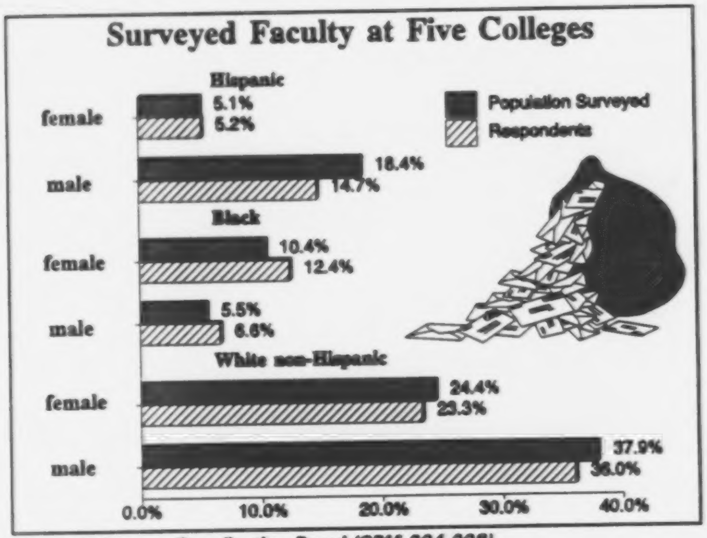


*Figure 6 Source: Coordinating Board (CBM 004-008).*

*Figure 6* has been adjusted to reflect those surveyed. Only 565 of 1100 White Non-Hispanic faculty were surveyed, while all 360 Minority faculty were surveyed, as indicated in *Table 1*. Other Racial/ Ethnic groups were not considered. Consequently, a true and valid representative sample of both minority and non-minority faculty was obtained in this study. Demographics of faculty respondents were very close to the demographics of the population sampled.

*Table 2* further emphasizes how representative the population sampled was to the total population of the colleges surveyed. There was a slightly greater response rate among all female groups than males, but no single group was 3% over or under the actual population.

## GENDER AND RACIAL/ETHNIC GROUPS

| Racial/Ethnic Group | Respondents | | Population | |
|---|---|---|---|---|
| | Male | Female | Male | Female |
| Hispanic | 76.6% | 23.4% | 73.9% | 26.1% |
| Black | 34.9% | 65.1% | 34.7% | 65.3% |
| White Non-Hispanic | 62.3% | 37.7% | 61.9% | 38.1% |
| Total Population Surveyed | 59.9% | 40.1% | 56.8% | 43.2% |

*Table 2 Responding faculty by gender and racial/ethnic group.*

Responses to the preliminary surveys on asking respondents to state their specific ages were not satisfactory. A decision was made to use age groups on the pilot survey. The response rate climbed to almost 100% on both faculty and student returns. ***Figure 9*** indicates that nearly 88% of the Black faculty and 90% of the Hispanic faculty will not reach 65 years of age before the year 2000 and over 55% of each group will not reach that age before 2010. The White non-Hispanics tend to be older with more than half over the age of 45. This factor has several implications when compared with other data collected in this survey. This will be discussed in the conclusions and recommendations portion of this report.

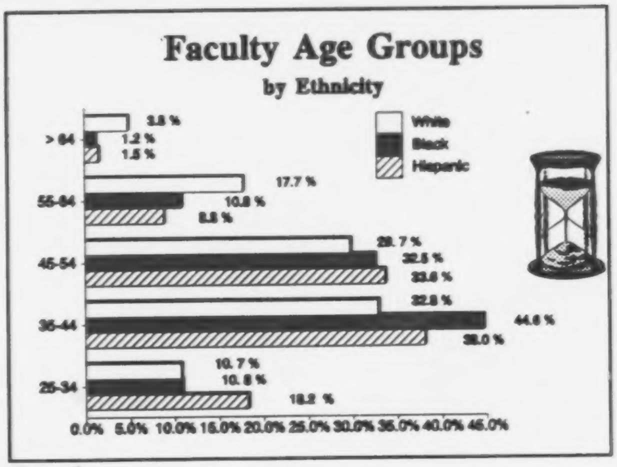


*Figure 9*

## YEARS TEACHING

The majority of faculty have several years of teaching experience in their occupational area (see ***Figure 10*** next page). As an example, 58% of the Black faculty and 45.9% of the Hispanic faculty have ten or more years teaching in their technical-occupational program. Only 34% of the Blacks and 29% of Hispanics responding, have five years or less. White non-Hispanic faculty are more evenly spread across the entire span of years teaching. Only 7.3% of all the Hispanic faculty teaching technical-occupational education were hired in the past three years, compared to approximately twice that proportions for Black and White non-Hispanic faculty. The conclusions drawn from this data will be discussed in further detail later in this paper.

## TEACHING AREAS

The faculty who responded to the survey were from all major technical-occupational areas. There were several major dissimilarities as noted in ***Figure 11***. The most obvi-

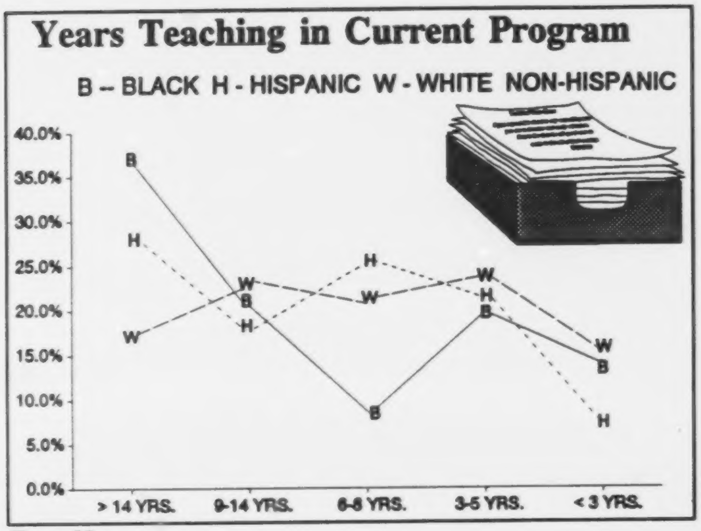


*Figure 10*

ous difference is that over 60% of Hispanic males teach in industrial courses and over 50% of White non-Hispanic, males teach business courses. There was an absence of Hispanic females teaching in industrial programs. More than 43% of the minority female faculty who responded teach in some health occupations program. Public service occupations have a greater proportion of Black male faculty, while Hispanic male faculty showed the least participation in this field. Black and White non-Hispanic males, on the other hand, show less participation in applied arts than the other groups.

The distribution of faculty by racial/ethnic group becomes very important when combined with other findings which are discussed later in this paper. The conclusions and recommendations regarding those comparisons, will also be discussed in some detail.

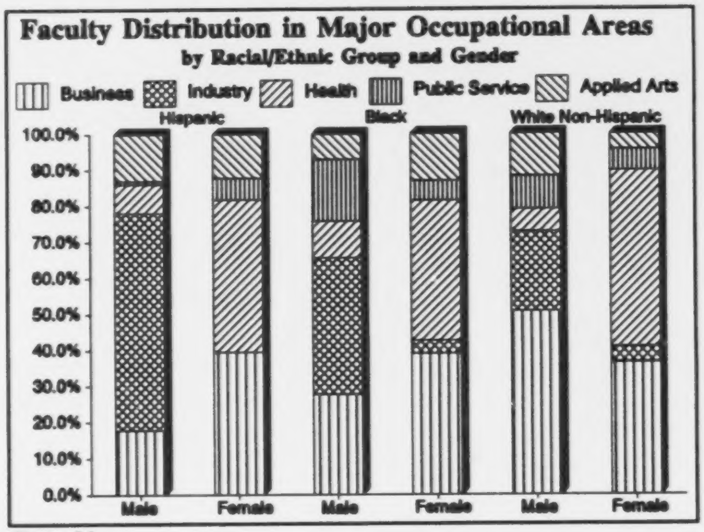


*Figure 11*

## ACADEMIC PREPARATION

A large divergence between demographic groups is evident in the academic degrees held by technical-occupational faculty (see ***Figure 12*** on the next page). Black females lead the groups in higher education degrees with over 72% holding a master's or higher degree, while only 15% of the Hispanic male faculty had attained that level of academic preparation. Over half of the Hispanic male faculty had an associate's degree or less as the highest degree held and 37% of this group do not hold any higher education degree. Over 60% of the male Hispanic faculty teach in industrial occupations with 74% of those certified in the occupation that they teach. This will be discussed in student and faculty perceptions of characteristics of a "good instructor" and further in recommendations section.

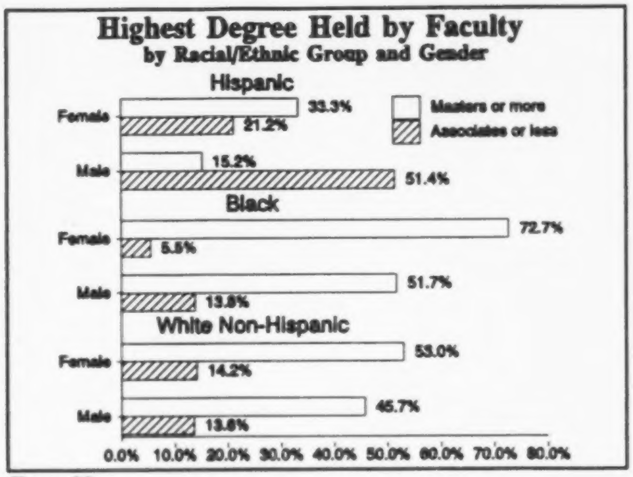


*Figure 12*

The distribution of the technical-occupational faculty with master's degrees among the major technical-occupational areas is shown in *Figure 13* Business and public service faculty led in percentage of master's degrees held and were fewest in proportions of faculty with an associate's degree or less. Industrial occupations faculty, as discussed earlier, had the lowest percentages of master's degrees and the highest proportion of those with associate's degrees or less. Health occupations faculty have obtained a high percentage of master's degrees, but were also second only to industrial in the percentage of faculty with an associate's degree or less as the highest academic degree held by faculty. Over 88% of those were female and nearly 60% were White non-Hispanic females. Second, were Hispanic females with nearly 28% of those faculty having earned an associate's as the highest degree held. This concludes the demographic description of the respondent faculty. This data will be discussed in detail in the conclusions and recommendations portion of this manuscript.

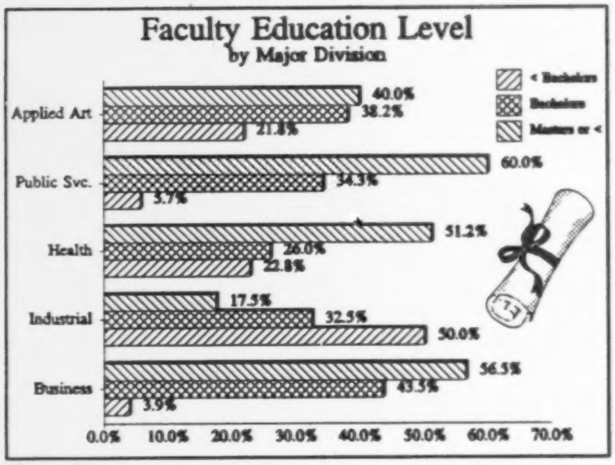


*Figure 13*

# STUDENT RESULTS AND OBSERVATIONS

The following table describes the mailing (N), responses (n) and the response rates (%) for the two student surveys. The identical procedure was used for each mailing (see methodology).

COMPARISONS OF STUDENT RESPONSES BY COLLEGE

| | MINORITY | | | WHITE NON-HISPANIC | | |
|---|---|---|---|---|---|---|
| | N | n | % | N | n | % |
| COLLEGE A | 496 | 81 | 16.33% | 352 | 74 | 21.02% |
| COLLEGE B | 444 | 94 | 21.17% | 470 | 127 | 27.02% |
| COLLEGE C | 496 | 93 | 18.75% | 500 | 119 | 23.80% |
| COLLEGE D | 499 | 76 | 15.23% | 500 | 146 | 29.20% |
| COLLEGE E | 499 | 81 | 16.23% | 500 | 115 | 23.00% |
| TOTALS | 2434 | 425 | 17.46% | 2322 | 581 | 25.02% |

*Table 3*

Response rates were highest among White non-Hispanic females (26.2%) and lowest among Black males (12.1%). Although the response rates are below those that would make this investigation statistically significant, it is believed that much of the data were valid for descriptive analyses and that inferences drawn from those analyses are valid.

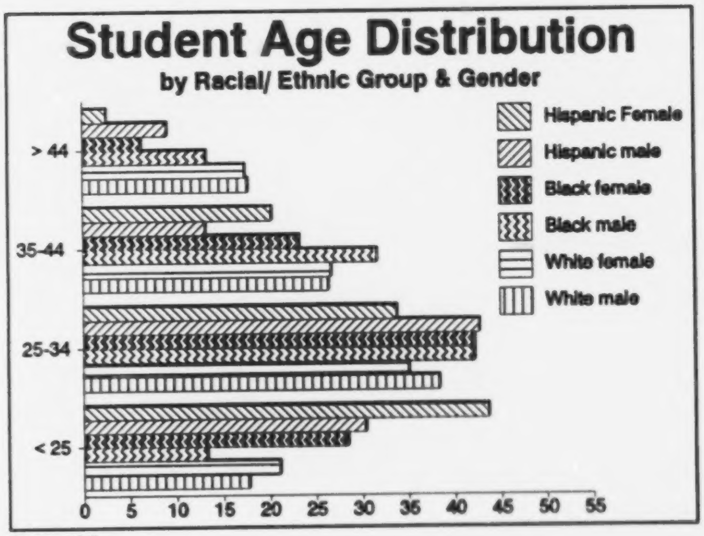


*Figure 14*

## DEMOGRAPHICS

Over 37% of the student respondents were in the age group from 25 to 34 years, which was the highest percentage for every group except Hispanic females. Almost 45% of Hispanic females were under 25. Black males reported fewer than 14% under the age of 25 in contrast with 26% of all students. Approximately 22% of Hispanics, male and female, reported being over 35 compared to more than 36% of the total respondents. The demographics of the respondents may not accurately reflect the actual age of the student population, but it closely approximates the age distribution observed at El Paso Community

College. Each college has more comprehensive figures in its student records. No statistical differences in student perceptions, based on gender, were found.

## YEARS IN PROGRAM

As well as being older than the "traditional student", many of the students who attend community colleges will not complete any program in two years or less. ***Table 4*** demonstrates that almost 30% of minority students and over 31% of non-minority students have already been in their program for over three years. There were no significant differences in these data based on racial/ethnic group. The differences were based more on gender with the exception of Black females, who were more comparable to the males in the greater than five years group. They also had the highest percentage with over three years in their program (35.5%) while Black males had the lowest percentage with 24.2%. The students who were interviewed because they stated that they would not complete the program usually stated that family concerns were taking precedence over concerns about school at the time and the need to drop out to support the family.

| First Started in Program | < 3 yrs. | 3-5 yrs. | > 5 yrs. |
|---|---|---|---|
| Hispanic male | 66.9% | 18.5% | 14.5% |
| female | 75.0% | 16.6% | 8.3% |
| Black male | 75.8% | 21.0% | 13.3% |
| female | 64.5% | 18.3% | 17.2% |
| White male | 67.9% | 18.1% | 13.9% |
| female | 71.3% | 19.1% | 9.6% |

***Table 4***

## EDUCATIONAL BACKGROUND

The students have widely varied educational backgrounds. Only 0.25% did not graduate from high school or obtain a GED. Hispanics were highest of those who entered with a GED with 12.8%, followed by White non-Hispanics with 7.2% and Blacks fewest with 5.9%. The majority of each group was females. Responses showed that 37% of Hispanic students, 23% of Black students and 22% of White non-Hispanic students entered their current program with a high school diploma as the highest educational level prior to entering their current program. Male students (22%) and female students (18%) already had at least an associates degree before starting their current program. Over 10% (103), of all students (17% of White non-Hispanics, 6% of Blacks and 5% of Hispanics) reported already having a bachelor's or higher degree before entering their current program. About 45% of all students reported having some college before entering their present program. The MOVED survey results indicated that 16% of the Hispanic students, 20% of the Black students, and 27% of the White non-Hispanic students reported being certified or licensed in a field before entering their current program.

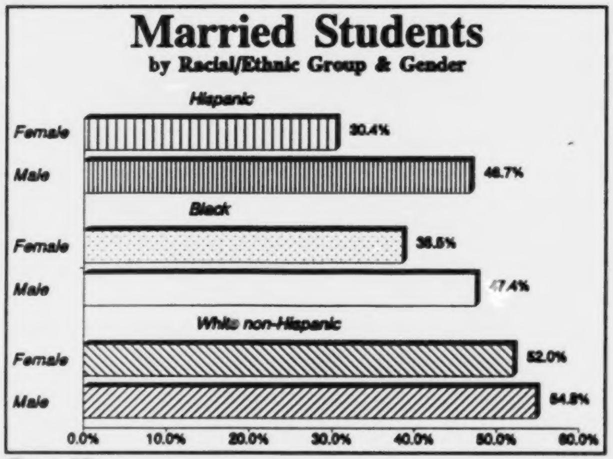


*Figure 15*

*Figures 15 and 16* illustrate that only 38% of the respondents on this survey were single. The remaining 62% of the females and 59% of the males are married or single heads of households. Nearly 14% of all those students who responded reported being single, head of household. Over 16% of that group reported being in their program for 5 or more years. Single, head of household comprised 17% of those who entered their program before 1984. Married students constituted 47% of the total but 57% of those entering before 1984 and 48% of those who were in their program for 5 years or more. Hispanic females reported 21% as single, head of household and 29% of those in their program for 5 years or more. Black female, single, head of household reported 31% of those in their programs since before 1984. More than 43% of those in their programs longer than five years were married black females compared 40% of total.

In the preliminary study, lack of child care was one of the factors that students gave when asked why other students had dropped from their program. Trouble with the students' spouses, especially husbands, because of the time taken up with school and homework was mentioned several times. This was reported especially by nursing students who were in their last year of the program and approaching graduation and wage earning.

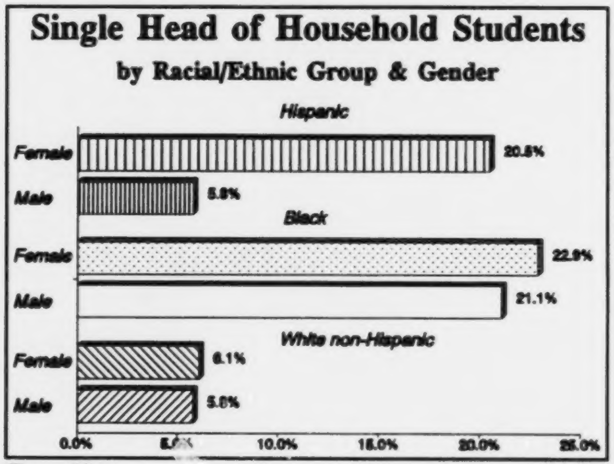


*Figure 16*

Those students who would be expected to use child care facilities rated them very low. It was rated much lower by single, head of household students; 39% rated them very poor, with 72% rating them average or below. One third of married students rated them very poor and 57% average or below, while 83% of the single students rated them average or above. There were several comments on this subject from the students. Some of these suggestions were sharing child care between students and exchanging child care for in-kind services. Discussion of dependent care is included in the recommendations portion of this report.

Minority students seem to be focused in areas according to gender and racial/ethnic group. Only 5.4% of the minority students and 12.2% of non-minority students did not list a major. Over half of minority students are enrolled in some type of a business course. Hispanic females were highest with 64.1%. Hispanic and White non-Hispanic males continue to dominate the industrial programs. Only 20% of the minority students reported being enrolled in a health occupations course compared with practically 30% of White non-Hispanic students. White non-Hispanic males in this study were very close to the same figures as minority females in percentage of participation in health occupations. Public service occupations had 4% of minority students enrolled in these programs contrasted to almost 22% of the White non-Hispanic students. This is significant when correlated with the job market picture in ***Figure 1*** and will be discussed later in this paper.

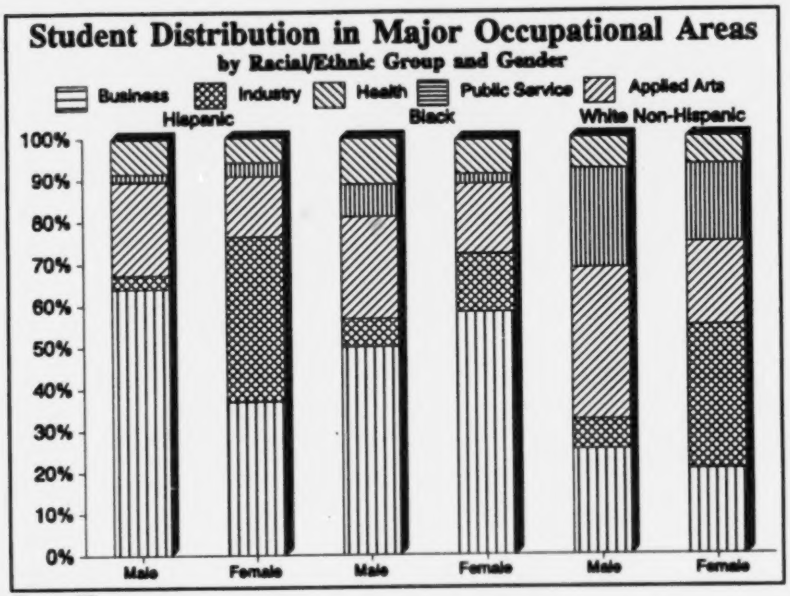


*Figure 17*

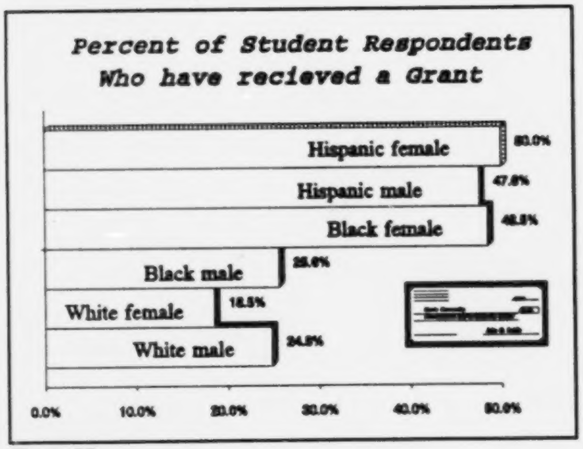


*Figure 18*

## FINANCIAL AID

***Figures 18 - 20*** appear to indicate that current financial aid is distributed in the ratios that are consistent with the projected changes in the work force participation in ***Figure 3***. Minority females reported using grants, loans, and scholarships in higher proportions than any other group. Pell grants were rated as good to very good by 83% of the Hispanic females who received grants. Well over 50% of the same group rated Private Industry Council (PIC) and Veterans Administration (VA) at average to very poor. Hispanic males were in agreement with 73% on Pell and over 65% on PIC and VA. Black females rated Pell at 70% good to very good, 70% rated PIC average or less and VA 54% average or less. Black males rated Pell high at 70% and PIC low at 67% poor to very poor, but rated VA 63% good to very good. White non-Hispanic males rated Pell 62% good to very good, PIC 76% average or below and VA 57% above average. White non-Hispanic female's numbers were 80% for Pell and approximately 60% average and below on PIC and VA. It should be noted here that several of those surveyed at two sites were active duty military personnel. When Minority faculty were asked to rate grants, from their students point of view, 70% rated Pell as good to very good, 83% rated PIC as good to very good and 80% rated VA as good to very good.

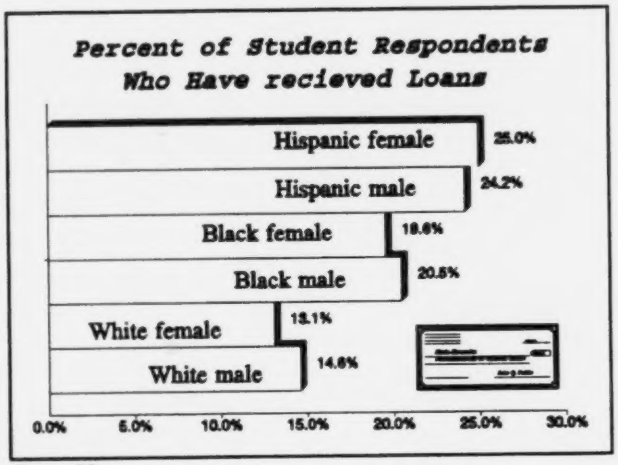


*Figure 19*

Hispanic students reported using loans half as often than grants. Black female students also reported less than half the use of loans than grants. Black males and White non-Hispanic students are much more evenly divided between grants and loans, with 50% of the Black males and White non-Hispanics, 44% of Hispanic males, and slightly more than one third of Hispanic and Black females report having used both grants and loans. Approximately 15% of students, who have used grant funding, have also received scholarships. Several of the student comments were in reference to a perceived inequity in the distribution of financial aid by both minority and non-minority students.

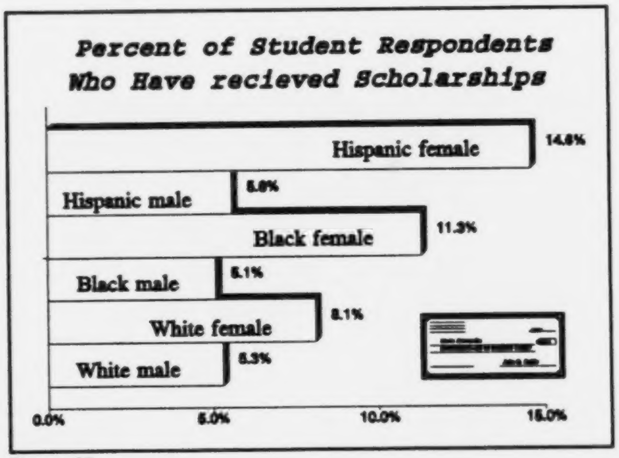


Figure 20

A small percentage of students reported having received any type of scholarship ***Figure 20***. Female respondents reported receiving about twice the number as male respondents. Hispanic females were again the leaders in this area. More than 50% of all students rated the scholarship that they had received as good to very good, with no more than 5% difference based on racial/ ethnic group. Work study programs and job placement were rated even higher by all groups ranging from about 50% for White non-Hispanic to 64% for Blacks, rating them both good or very good. Males rated all scholarships, work study and job placement about 15% lower than females. Only 33% of Hispanics, 27% of Blacks, and 14% of White non-Hispanics rated work study programs. Alternative financial aid programs will be discussed in recommendations portion of this report.

# COMPARISONS AND CONTRASTS IN STUDENT AND FACULTY ATTITUDE RESPONSES

There are several items from the MOVED survey that present some interesting comparisons between faculty and students and among the racial/ethnic groups surveyed. This section will deal with some of those comparisons and contrasts. Non-parametric, specifically Kendall's coefficient of Concordance mean ranks, frequency distribution and crosstabulation, were used in the analysis of this data. The Chi square for the data was very high, the significance was .0000, and the Kendall's W was in the significant area in all cases when Kendall's was used. In each case where a duplicate ranking appears the mean rank figure showed less than a .05 difference between the two figures.

## REASONS STUDENTS ENTER PROGRAMS

**RANKING* COMPARISONS FOR PERCEPTIONS OF**
**REASONS STUDENTS ENTER**
**TECHNICAL-OCCUPATIONAL PROGRAMS**
Ranking is based on Kendall's Coefficient of Concordance Mean Ranks

| | Minority | | White Non-Hispanic | |
|---|---|---|---|---|
| TOTALS | Students | Faculty | Students | Faculty |
| PERSONAL INTEREST | 1 | 4 | 1 | 4 |
| GET A JOB | 1 | 1 | 2 | 1 |
| EARN A 2-YEAR DEGREE | 3 | 3 | 3 | 3 |
| IMPROVE CURRENT JOB SKILLS | 4 | 2 | 4 | 2 |
| EARN A 1-YEAR CERTIFICATE | 6 | 5 | 6 | 6 |
| TRANSFER TO 4-YEAR COLLEGE | 4 | 6 | 5 | 5 |

*Table 5*

A closer analysis of the perceptions of why students enter technical-occupational programs indicates similarities and some important dissimilarities between faculty and students. Both minority and non-minority students consider **Personal Interest** and **Get a Job** as the first and second reasons of why students enter technical-occupational programs. All of the respondents consider the goal of **Earn a 2- Year Degree** as the third most important reason student's enter these programs. The major differences between faculty and student perceptions were: 1. Faculty consider **Personal Interest** (28% very important or essential) as the fourth most important reason as compared to student's perception that this reason was the most important reason (75.5% very important or essential), and 2. Faculty ranked **Improve Current Job Skills** as the second reason (9.4% of faculty rated this not necessary) while minority students (26.7% not necessary) ranked this fourth and White non-hispanic students (34.1% not necessary) ranked it fourth. Applied arts (2% faculty and 32.2% students not necessary) and business (faculty 4% and students 23% not necessary) had the greatest difference with this variable. While there seems to be agreement on **Transfer To a Four-Year College** in the rankings a closer look reveals that 43.7% of students rated very important or essential, while 71.4% of the faculty rated the same item not very important or not necessary. The minority students, who rated this fourth in importance, 52.5% rated it very important or essential whereas only 16.7% of minority faculty agreed.

Faculty perceive that **Improving Current Job Skills** is more important to the students and entering a program for **Personal Interest** is not as important to students. Students have an almost opposite viewpoint. There is also a large disparity between faculty and student perceptions of the student's aspirations for higher education. This is especially true of students at one college, which is located near a major university. White non-Hispanic faculty and students ranked **Transfer to a Four-Year College** number 3, minority students as number 4, while minority faculty ranked it number 6 of 6.

## COMPARISONS OF RATINGS OF STUDENT SERVICES

### REMEDIATION

**Mathematics** remediation was used by 78% of Hispanic, 79% of Black, and 54% of White non-Hispanic student respondents. It was rated highly, 54% in the good or very good by faculty and 61% by students. This item was rated lowest by White non-Hispanic faculty at 50% and highest by White non-Hispanic students at 62% in the top two ratings. The major differences were between students at different colleges which ranged from 71% to 51% in the high range.

Reading remediation was reported as being used by 76% of Hispanic, 72% of Black and 44% of White non-Hispanic students. It was rated higher than mathematics with 66% of students and 67% of faculty rating the programs good or very good. Black faculty rated it highest at 72% and Hispanic faculty lowest with 62% in that range The range between colleges was 70% as highest and 61% as lowest in the top two categories.

Writing remediation showed 77% of Hispanic students, 76% of Black students and 45% of White non-Hispanic students reporting having used these programs for remediation. Faculty rated this at 59% and students at 66% above average. Black students rated it highest with 70% and Hispanic faculty lowest with 57% rating these programs above average. The range of student rating between colleges was 62% to 73% in the above average range.

**Study skills** was reportedly used by 72% of Hispanic, 72% of Black and 44% of White non-Hispanic students. Faculty rated this at 55% and students at 63% above average. There was almost total agreement on this aspect, with only a 4% difference between the highest and lowest student ratings by college and a 2% difference among student and 3% among faculty by racial/ethnic groups.

ESOL (English for Speakers of Other Languages) was rated by 51% of Hispanic students, 51% of Black students and 31% of White non-Hispanic students. Only 41% of students and 38% of faculty rated these programs above average after rating the other types of remediation well above average. More than 52% of Hispanic students rated ESOL above average and 44% of Hispanic faculty agreed. Conversely, only 31% of White non-Hispanic students rated it above average and 31% of White non-Hispanic faculty agreed. Students at one college rated it at 60% in the above average range while the lowest was 29% in that range.

## PROGRAM/COLLEGE STUDENT SERVICES RATINGS

**COMPARISONS OF RATINGS OF PROGRAM/COLLEGE
BY STUDENTS FACULTY AND HIGH AND LOW
RATINGS BY STUDENTS BY COLLEGE**

| Variable Label | Student Rating | | Faculty Rating | | Variation by College | |
|---|---|---|---|---|---|---|
| | >AVG | <AVG | >AVG | <AVG | HIGH | LOW |
| Quality of Instruction | 77% | 4% | 92% | <1% | 81% | 65% |
| Grading/Testing | 72% | 2% | 73% | 1% | 65% | 76% |
| Course Content | 76% | 2% | 86% | <1% | 81% | 67% |
| Class size | 72% | 4% | 67% | 6% | 65% | 80% |
| Class Schedule | 70% | 9% | 64% | 5% | 80% | 60% |
| Class Location/s | 68% | 9% | 61% | 6% | 82% | 56% |
| Counseling/Advising | 51% | 14% | 41% | 15% | 68% | 40% |
| Hand's on Laboratories | 66% | 8% | 66% | 11% | 82% | 59% |
| Quality of Equipment | 56% | 13% | 46% | 19% | 61% | 48% |
| Equipment/Student Ratio | 55% | 13% | 49% | 21% | 62% | 48% |
| Practical Experience | 58% | 8% | 59% | 12% | 66% | 50% |
| Library/Learning Center | 64% | 9% | 52% | 12% | 70% | 50% |
| AV Equipment/Supplies | 55% | 8% | 43% | 12% | 62% | 42% |
| Computer Aided Learning | 54% | 13% | 32% | 33% | 59% | 41% |
| Bookstore | 41% | 18% | 24% | 34% | 54% | 29% |
| Cafeteria | 34% | 26% | 14% | 47% | 46% | 26% |
| Registration Process | 50% | 20% | 24% | 34% | 68% | 39% |
| Business/Registrar's Office | 50% | 12% | 27% | 21% | 55% | 47% |

***Table 6 Ratings of Program/College Student Services***

Students and faculty generally perceive their program/college to be doing well as seen in ***Table 6***. There were variations between racial/ethnic groups and especially between colleges. There was a positive correlation between rating on these items, as well as all student services and the racial/ethnic composition of the faculty. In the college that had a majority of Hispanic faculty every item was rated higher by Hispanic students than any other group. In the college that had only 12% minority faculty, 12 of these 18 items were rated higher by White non-Hispanic Students. In the three schools with the highest percentages of Black faculty, Black students rated these services higher than any other group, in direct proportion to the percentage of Black faculty (14% 9 items; 16% 11 items; and 18% 12 items). Conversely, where the faculty has few Hispanic faculty (under 10%) Hispanic students rated the services lower than the other racial/ethnic groups with only one or two items rated higher than other racial/ethnic groups.

Black students rated **Quality of Instruction** lowest with 73% above average in contrast to 78% of both Hispanic students and White non-Hispanics, rating it above average. Hispanic students had the largest difference among the colleges with 89% rating it above average at one college and 68% at another. Black students rated **Grading and Testing** and **Course Content** lowest with 67% rating for both items in the above average range. However, at one college they rated this item at 85% in the above average categories. **Grading and Testing** was rated by 74% of Hispanic students and Course Content by 79% of White non-Hispanic students as above average. **Class size** was rated above average by 59% of Black students as compared to 80% of White non-Hispanic students.

**Class Location** was rated by 66% of White non-Hispanic and 72% of Hispanic students as above average. **Counseling and Advising** was rated above average by 50% of White non-Hispanics while, 55% of Black students rated it above average over all. In those colleges that have higher percentage of Black faculty, 7% of Black students rated this item lower than White non-Hispanics in one case, but 5 to 27% rated it higher in the other two. They also rated it 14 to 19% higher than Hispanic students at those colleges. At the college with a majority of Hispanic faculty, 75% of Hispanic students rated **Counseling and Advising** above average. At the colleges with less than 10% Hispanic, faculty the figures were 29% and 32% at this level. **Quality of Equipment** was rated as above average by 54% of White non-Hispanics and 62% of black students. **Library/Learning Centers** were rated above average by 56% of White non-Hispanic students and 74% of Black students. White non- Hispanic students rated AV Equipment and supplies 15% lower than Black students, **Computer Aided Instruction (CAI's)** 10% lower than Hispanic students, Bookstores 16% and Cafeteria 18% lower than Black students. The remainder of the items were very close in student ratings.

## SPECIAL STUDENT SERVICES

*Table 7* demonstrates how special student services were rated by respondents. Since the faculty were asked if any of their students used these services, the higher response rate was expected. Students were asked to rate them if they had used them. Over twice the percentage of minority students reported using special student services as non-minority students. In every instance, Hispanic students had a higher response rate (n%) than any other student group and White non-Hispanic students had the lowest response rate. Students consistently rated services in the above average (>AVG) areas than faculty. Only **Handicapped Services** and **Personal Counseling** were rated by students as below average (<AVG) more than by faculty.

The greatest degree of disparity in the ratings was between the colleges. Every college had at least one service that was rated the highest of the group by its students. Students at two of the colleges did not rate any of the services as lowest of the group. More students at one of the colleges rated the first eight of the eleven services, below average more than any other college and gave the lowest above average rating to six of the services.

**COMPARISONS OF RATINGS OF SPECIAL STUDENT SERVICES**
**BY STUDENTS FACULTY AND HIGH AND LOW**
**RATINGS BY STUDENTS BY COLLEGE**

| Variable Label | Students | | | Faculty | | | Variation by College | |
|---|---|---|---|---|---|---|---|---|
| | n % | >AVG | <AVG | n% | >AVG | <AVG | HIGH | LOW |
| Handicapped Services | 11% | 60% | 19% | 53% | 55% | 13% | 64% | 41% |
| Language Lab | 11% | 51% | 13% | 42% | 39% | 18% | 58% | 33% |
| Basic Skills Tutoring | 18% | 60% | 13% | 55% | 50% | 13% | 69% | 40% |
| Subject Specific Tutoring | 23% | 69% | 11% | 59% | 42% | 19% | 76% | 50% |
| Math Skills Program | 19% | 64% | 10% | 53% | 44% | 10% | 75% | 44% |
| Study Skills Program | 15% | 63% | 10% | 48% | 39% | 14% | 69% | 43% |
| Personal Counseling | 23% | 52% | 20% | 57% | 34% | 18% | 65% | 27% |
| Minority Student Services | 12% | 47% | 20% | 42% | 35% | 24% | 67% | 30% |
| Women Student Services | 11% | 49% | 18% | 45% | 44% | 18% | 58% | 33% |
| Child Care Facilities | 10% | 39% | 30% | 42% | 29% | 38% | 61% | 20% |
| Bilingual Vocational Programs | 8% | 41% | 24% | 35% | 22% | 41% | 60% | 8% |

*Table 7 Ratings of Special Student Services*

There were some variation in the ratings by racial/ethnic group. **Handicapped Student Services** were ranked highest by Black students at 67% above average and lowest by by Hispanic students with 53% rating them above average and 23% rating them below average. **Language Labs** were rated 10% higher by Hispanic students than by White non-Hispanics. Hispanic students also reported using them twice as often as other student groups. Of those White non-Hispanic students who did use **Tutoring (Basic Skills)** and the **Math Skills Services**, more rated them above average by 13 to 25% higher than Black students, and 4 to 9% higher than Hispanic students. **Study Skills Program** were rated highest by Black students, but there was only a 4% range among all groups. **Personal Counseling** was rated by 21% of Black students as below average and only 36% rated it above average which was 20 percentage points below other student groups.

## QUALITIES OF A GOOD INSTRUCTOR

The rankings by both minority and non-minority students and faculty by individual college vary from the composite scores. ***Table 8*** illustrates some of the disparity in perceptions between students and faculty. Every group of students and White non-Hispanic faculty rated **Practical experience in the field they are teaching** as the prime quality of a good instructor. Minority faculty at one college rated it as the third most important item (see ***Table 11, Appendix F*** for breakdown by college). Minority faculty rated **Have a high level of technical knowledge** as the most important factor. Students ranked this second third or fourth in importance varying between colleges, but in only two of the five colleges were minority and non-minority students in total agreement. Nearly half of the additional comments made by students were regarding instructor performance or a perceived lack of interest in students on the part of the faculty. A minority student said, "Teacher has as much teaching skills as a plant". Another said "If the teachers are great, the students would be greater".

**RANKING* COMPARISONS FOR PERCEPTIONS OF QUALITIES OF A GOOD INSTRUCTOR**

*Ranking is based on Kendall's Coefficient of Concordance Mean Ranks

| | Minority | | White Non-Hispanic | |
|---|---|---|---|---|
| variable | Student | Faculty | Student | Faculty |
| PRACTICAL EXPERIENCE | 1 | 2 | 1 | 2 |
| TECHNICAL KNOWLEDGE | 3 | 1 | 2 | 1 |
| EASY TO APPROACH | 4 | 5 | 3 | 4 |
| SUPPORTIVE | 2 | 4 | 4 | 3 |
| MAINTAIN HIGH STANDARDS | 5 | 3 | 5 | 5 |
| FIRM BUT FAIR | 6 | 6 | 6 | 5 |
| AVAILABLE | 7 | 8 | 7 | 7 |
| CULTURALLY AWARE | 8 | 9 | 9 | 8 |
| MINORITY (ROLE MODELS)* | 9 | 7 | 7 | 9 |
| BILINGUAL | 10 | 10 | 10 | 10 |

*Table 8 Note: * WHITE NON_HISPANIC STUDENTS WERE ASKED ONLY (ROLE MODEL)*

**Minority Role Models** were most important to Black faculty with 81% rating it at the highest two items on the five point Likert scale, from Not necessary to Essential. Hispanic students rated it lowest with 48% rating it that way. (White non-Hispanic faculty were not considered in this comparison). White non-Hispanic students rated **Role Model** higher than minority students rated **Minority Role Model**. The minority faculty of colleges "C" and "D" both rate **Minority Role Model** as the third most important quality of a good instructor, only behind **Technical Knowledge** and **Practical Experience** in importance. This is not in line with other faculties. The other qualities of a good instructor are comparably perceived by the respondents with **Bilingual** ranking as least important by all respondents. Although 56% of Hispanic faculty rated **Bilingual** as very important or essential, only 31% of Hispanic students rated it that way.

## REASONS STUDENTS WILL COMPLETE PROGRAM

RANKING COMPARISONS FOR PERCEPTIONS OF WHY
STUDENTS WILL COMPLETE THEIR
TECHNICAL-OCCUPATIONAL PROGRAM
*Ranking is based on Kendall's Coefficient of Concordance

MINORITY AND NON-MINORITY STUDENTS AND FACULTY

| Variable Labels | Students | | Faculty | |
|---|---|---|---|---|
| | Min | NM | Min | NM |
| WANT JOB TO BE PROUD OF | 1 | 5 | 6 | 7 |
| WANT BETTER PAYING JOB | 2 | 6 | 1 | 8 |
| INTERESTED IN THE SUBJECT | 3 | 2 | 4 | 2 |
| ATTEND CLASS REGULARLY | 4 | 3 | 4 | 4 |
| PERSONALLY MOTIVATED | 5 | 1 | 3 | 1 |
| KEEP CLASS WORK UP TO DATE | 6 | 4 | 7 | 6 |
| DON'T WANT TO WASTE TIME | 7 | 8 | 13 | 12 |
| FAMILY SUPPORT | 8 | 9 | 9 | 11 |
| GOOD BASIC COLLEGE SKILLS | 9 | 6 | 14 | 9 |
| STUDY HARD | 10 | 10 | 8 | 5 |
| DON'T WANT TO WASTE MONEY | 10 | 11 | 15 | 17 |
| INSTRUCTOR SUPPORT | 12 | 11 | 2 | 3 |
| ENJOY CLASSES | 13 | 11 | 10 | 10 |
| FINANCIAL AID | 13 | 17 | 11 | 16 |
| PERSONAL FINANCIAL RESOURCES | 15 | 15 | 17 | 15 |
| PEER SUPPORT | 16 | 14 | 15 | 13 |
| COURSE REQUIRED FOR JOB | 17 | 16 | 12 | 14 |
| SPONSOR REQUIRES COURSE | 18 | 18 | 18 | 18 |

***Table 9 Ratings of Why Students Will Complete***

There are several significant differences among the perceptions of faculty and students of why a student will complete a technical-occupational program. This category also produced the most significant differences between colleges (see ***Table 12 Appendix G***). Minority (Min) students rank the reason **I/they want a job that I/they** can be proud of as the most important. Over 92% of Hispanic females rated this in the top two Likert categories, compared to 81% of all females and 81% of Hispanic males. Minority (Min) faculty rank this reason as sixth and rank **I/they want a better paying job** as the first. Minority and non-minority students and minority faculty at the one technical college surveyed (***see Figures 11 & 12, Appendices G & H***) list **I/they want a better paying job** as the prime reason students will complete their technical/-occupational program, while the non-minority faculty rate it sixth.

Non-minority (NM) faculty and students rank **I am/they are personally motivated** as the most important reason and **I am/they are interested in the subject** as the second most important reason. Minority (Min) students rank these reasons as fifth and third, while the minority faculty rank them third and fourth. **I/they enjoy the classes** was more important for faculty than for students.

The major difference between the faculty and student perceptions is that the faculty rank **I/They have support from instructors** as the second (Min) and third (NM) reasons why students will complete the program. Students perceive this reason as number twelve (Min) and eleven (NM). By comparison **I/they have support from other students** was slighter more important for non-minority students than for minority students, but consistently near the bottom of the list. **I/they have family support** was rated equally by students with very little difference related to racial/ethnic group or gender.

Minority and non-minority students ranked **I/they do not want to waste time**, seven and eight respectively. Faculty ranked that item thirteen (Min) and twelve (NM). **I/they do not want to waste money**, was most significant in students ten (Min) and eleven (NM) versus faculty fifteen (Min) and seventeen (NM). These represent a significant spread between student and faculty perspectives.

**I/they have good basic college skills (math, reading, writing etc.)** was ranked highest by non-minority students (six). More significantly, minority faculty ranked it fourteen. Non-minority faculty placed **I/they study hard** as five on their list of importance where students placed it ten. **I keep my class work up to date** was number one for non-minority students at one college and number seven for minority students at the same college.

I/they have **financial aid** responses were significant in that minority faculty placed more importance on it (eleven) than any of the other groups. In fact, non-minority students ranked financial aid as seventeen on their list. At one school this was ranked at number six by minority students and seven by minority faculty but seventeen by non-minority students and eleven by non-minority faculty. **I/they have personal financial resources** responses were very close together over all. Minority students at three of the five colleges and all non-minority students ranked this higher than **I have financial aid**, minority faculty at two colleges and non-minority faculty at three colleges agreed. **The course is required for my/their job**, minority faculty placed it more important than any of the other three groups. That **my/their financial sponsor requires this course** placed last was only item on which everyone agreed except non-minority faculty at one college who rated it slightly higher.

# COMPARISONS OF "WILL YOU COMPLETE?" (YES OR NO)

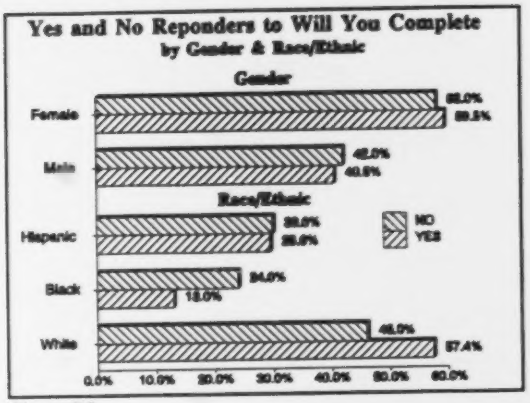


*Figure 21*

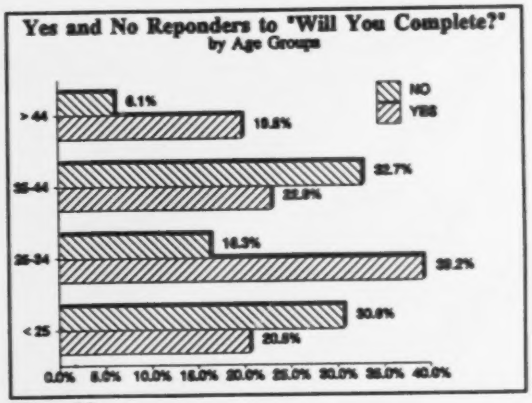


*Figure 22*

The differences in the demographics of those who perceived that they will complete (Yes group) their present program and those who perceive that they will not (**No** group) are shown in ***Figures 21-26***. This designation is based on the students' response to Variable 83, which asked, **Do you think that you will complete your current program?** Student responses were: 50 responded No; 894 responded Yes; and 61 did not respond. The last group were not included in the comparisons. The main difference in Racial-Ethnic group and gender is between the Black and the White non-Hispanic groups. Over twice the percentage of Blacks are in the **No group** as there are in the **Yes group**. White non-Hispanics show a much higher expectation of completing their program, making up 57% of the **Yes group** as opposed to 46% of the No group. The comparisons show that the those in the age group 34-44 years and those less than 25 years are 63% of the **No** group. More females (59.5%) perceive themselves as going to complete programs than males (40.5%).

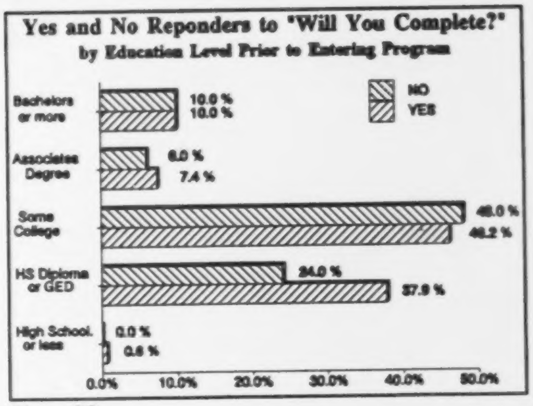


*Figure 23*

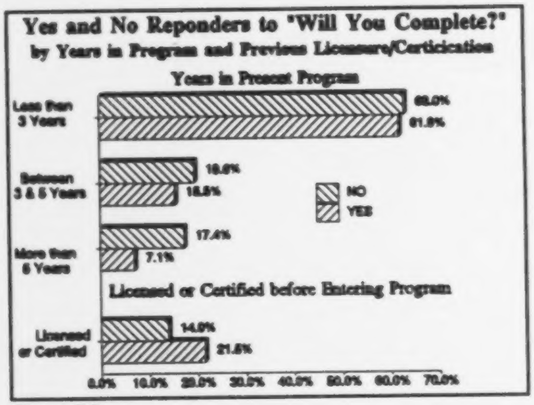


*Figure 24*

The surveyed group with a bachelor's degree or higher expectation of completing was equal (10%) between the **Yes and No groups**. The greatest disparity was in the High school/GED group. There was almost a 14% difference in perceptions about completing for this group and it was far greater than any other group. Almost half (46%) who had some college, stated that they will complete the program.

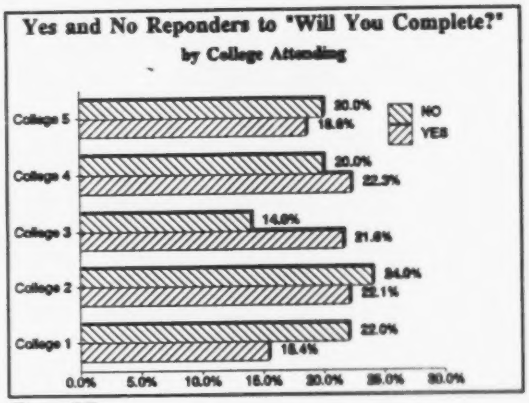


*Figure 25*

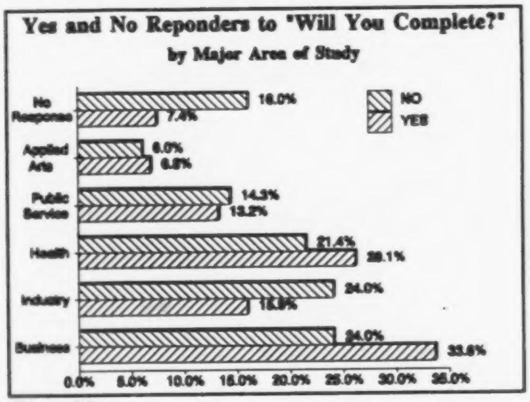


*Figure 26*

There is a major difference in those who have been in their present programs longer than others. Those who have been in their present programs for 3 to 5 years show a more than 12% and students with more than 5 years show a 33% decrease in their perception that they will complete that program. Students who were previously licensed or certified in some occupation have a 33% higher determination to complete than those who are not licensed or certified in any occupational skill.

More than twice the percentage of those who stated they will not complete did not list a major area or occupational specialty. The greatest differences were in industrial occupations with a 20% difference between the two groups and business occupations with a 16% differential. Health occupations had a 10% differential between the two groups.

Of the **No group**, 20% rated **Get a job** as not necessary compared to 13% of those in the **Yes group**. Of the **No group**, 42% stated that this was the essential reason that they entered their program (this was their number one reason for entering the program) as compared with 45% of the **Yes group**. Of the **No group**, 42% rated **Improve current job skills** on the bottom two items on the Likert scale as compared to 38% of the **Yes group**. Of **No group**, 55% and of **Yes group**, 63% rated **Earn a one year certificate** as not very important to not necessary. Of the **No group**, 31% stated that they had not necessarily entered the program to get an associates degree contrasted to 18% of the **Yes group**. The ratio of not necessary for **Transfer to four year college** was 44% for the **No group** (their lowest priority) versus 28% for the **Yes group**. Of the **No group**, 70% stated that the essential reason that they started the program was because of **Personal interest** compared to 76% for the **Yes group**.

# CONCLUSIONS AND RECOMMENDATIONS

Current literature supports the notion that Tinto's and other models can predict student persistence or exit outcomes (Halpin, 1990). Improved assessment, counseling, financial aid, academic assistance, faculty and community involvement, and institutional commitment play a role in assisting the student to complete technical-occupational higher education programs. It is the individual community or technical college's responsibility to assess all the factors and assure that the student will have the greatest opportunity to succeed, thereby helping improve the quality of the Texas work force.

Many areas should be considered in improving the students' access to success: Astin (1982) notes that "many legislators and policy makers are content to define access simply as the student's ability to enroll in some post-secondary institution." He further states that "with the proliferation of public community colleges and the substantial financial aid now available to needy students, the real issue of access is not who goes to college, but who goes to which college." What it is necessary to consider are those factors that will allow students the resources that will allow them to ultimately succeed. Among those areas that Astin addresses, are to:

1. Improve the institutional climate
2. Focus on "access to success"
3. Outline, define, and disseminate "factors of success"
4. Develop a program of academic preparedness for faculty
5. Assure that there is a functioning program of institutional effectiveness.

The data from the MOVED project on preceding pages will offer insights that assist in making recommendations for enhancing student persistence. The following conclusions and recommendations are based on this and results of the MOVED survey, review of current literature; and in consultation with experts in technical-occupational education.

## DEMOGRAPHICS

**CONCLUSIONS:** Texas has a very diverse population. As pointed out in the analysis of the student demographics, Texas' community and technical colleges students were older than the "traditional student" as described in the literature, with most of them 25-44 years of age. A large percentage of them take more than two years to complete their program. More than two-thirds of them had more than a high school diploma or GED, before starting in their present programs. This factor further emphasizes the fact that many of the students in community colleges are there for retraining or to change or upgrade their current career, as was indicated by current literature on the job market. Over 62% of them are either married or single, heads of a household.

Differing age groups, educational backgrounds, and ethnic composition will dictate how institutions should evaluate their programs and meet the needs of their various populations. Community college students are not, by age or background, recent high school graduates but adult learners. Many indicated obligations outside of school as a factor impeding their progress. This study has no way of indicating how many of these students are no longer in the program because they have dropped out of school temporarily or permanently.

Demographics cannot be changed, but they can be analyzed and interpreted. Understanding the age groups, gender, marital status, educational backgrounds, as well as racial/ethnic composition of the local student population is vital to institutional effectiveness. Single, married, and single head of household students have needs that require different approaches. Technical-occupational higher education in the community, junior and technical colleges of Texas can no longer assume that all students are alike and if treated equally will respond equally. Each institution's programs, (structure and content of their curriculum), counseling and advising, student services, remediation programs, and faculty must be focused to meet the needs of their diverse populations. Teaching strategies must be altered to fit the fact that most of the student population of our community and technical colleges are adult learners, many starting a second or third career. The MOVED Project has developed a method which could provide the needed input for institutional effectiveness evaluation. The procedure is by no means original and should be modified for each individual institution. It could be performed on a semester by semester basis, as a part of the registration process. This would assure a statistically significant return. Much of the demographic data are already available to the institution so that the survey could be shortened.

**RECOMMENDATIONS:**

1. A much more in depth local analysis of demographic data and attrition is indicated at each institution.

2. Implementation of a model similar to the MOVED instrument can be an effective institutional effectiveness tool at each institution, using the same three step methodology to obtain the final survey instrument specific to that institution.

## FACULTY

**CONCLUSIONS:** Experienced, knowledgeable, supportive faculty who are easy to approach and maintain high but fair standards are the qualities that seem to be of prime concern to the students. Faculty perceived that students completed their program in large measure because the faculty were supportive but students' perceptions were not in agreement with those of the faculty (see ***Figures 7 & 8)***. In order for faculty to be supportive, it is essential that they be aware of and understand student attitudes and perceptions. The MOVED survey revealed several discrepancies between what the students perceive as important to themselves and what the faculty perceive as important to the students. This outcome was subjective in that it sought perceptions or opinions of the students. Faculty can no longer assume what the students think or what their own agendas are. The use of information from a tool similar to the **MOVED** survey will assist the faculty in being more aware of their students perceptions and assist them in providing the environment that will enhance achievement and program completion.

Faculty need to become more involved in the development of the student. Not enough is being done in the area of establishing an organized rapport that would make the student feel more comfortable in his/her learning environment. In order to create an environment of understanding and sensitivity. Administrators, faculty, counselors, and support staff must be well informed about how each role is directed toward assisting students to reach their goals. To become well informed will require the development of in-service programs, orientations, and social gatherings.

In the student's perception of **Qualities of a Good instructor** the need for faculty **Minority Role Models** is near the low end of their list. The implications of these perceptions seem to indicate that **Minority Role Models**, despite references in the literature are not as important to students as the other factors listed. One minority student made the comment that one instructor was hired as a minority role model and was the worst instructor "I've ever had". Other data gathered in the **MOVED** study contradicts this perception. As was pointed out in the data on student's perceptions of the quality of services provided by their program/college and special student services there is a direct relationship between the racial/ethnic composition of the faculty and students satisfaction with the program/colleges services. There is already a strong minority base on which to build toward that balance as pointed out in ***Figure 9*** on page 18.

**Practical experience in the area in the field that they are teaching** was the student's highest priority in the **Qualities of a Good Instructor**. Almost 65% of all faculty are licensed or certified in the occupational area that they teach. This may indicate that they may be technically well qualified in their occupational area. ***Figure 10*** page 19 indicates a stability in the faculty at these colleges especially among minority faculty. This illustrates that these faculty may have not had practical experience in their technical-occupational field for this period of time.

Faculty who do not have degrees probably are not trained nor educated in the pedagogy of teaching adults at the post-secondary level. This lack of higher education preparation is apparently reflected in student comments that their instructors have a high level of "technical knowledge", but "do not know how to use it" or "lack motivation and interest in teaching". In some instances, it can be assumed that the students in the classrooms of some of these faculty have a higher level of academic preparation than the faculty member teaching the course (see student academic preparation on page 21). This data further reinforces the need to develop a program that will encourage faculty to obtain a higher level of academic preparation in order to enhance their teaching skills and thereby enhance student learning and completion rates.

**RECOMMENDATIONS:**

1. Focus more faculty development time and effort on factors that involve student issues.

2. Expand the advisory role of faculty and focus on involving the faculty in every aspect of the students' involvement. Begin with preassessment, and enrollment, to continue with counseling, advising, socializing, and end with completion, including congratulatory celebrations.

3. Courses and curriculum be developed or modified to fit the diversity of students' needs: Goal 3 Master Plan for Vocational and Technical Education 1991 Update: "To improve and expand technical education to training to ensure educational and employment outcomes of the diverse student populations within Texas".

4. Implement objective 4-d Master Plan for Vocational and Technical Education 1991 Update: "To have technical education staff representative of the student population in Texas". Action must be taken immediately through attrition and an active program of minority faculty recruitment.

5. Each college should look at the distribution of students and faculty among the various disciplines and make an effort to achieve parity among the racial/ethnic distribution among those divisions of the college.

6. Encourage outstanding minority graduates in each discipline to continue their education and to return to that program as faculty when they have achieved the experience and education requirements. This will also require each school to actively pursue articulation agreements with four year colleges and universities in their area commensurate with objective 2-e Master Plan for Vocational and Technical Education 1991 Update: "To implement new linkages among educational institutions."

7. Institute a cultural awareness program for faculty in those colleges with minority populations.

8. Immediate implementation of objective 4-b in the Master Plan for Vocational and Technical Education: 1991 Update: "To encourage technical education staff to.... remain current in their knowledge and application of their technical skills." This could be done by making practical experience in the faculty member's occupational skill area a criteria for continuing employment as well as for initial employment.

9. Implement objective 4-b in the Master Plan for Vocational and Technical Education: 1991 Update: "To encourage technical education staff to continue their academic studies, to enhance their teaching skills....".

10. Southern Association of Colleges and Schools (SACS) criteria be adopted by Texas Higher Education Coordinating Board as faculty qualification criteria.

11. An incentive plan be developed for current faculty to pursue further academic studies.

12. Community college administrators work with area Four-year institutions to provide appropriate programs to facilitate this process as stated in objective 2-e in the Master Plan for Vocational and Technical Education: 1991 Update: "To implement new linkages among educational institutions."

## STUDENTS

**CONCLUSIONS:** In addition to the obvious fact that faculty do not even approach the demographic proportions of Texas, the faculty and student distribution between and among the major fields of study are disproportionate. The MOVED survey indicated that over 60% of Hispanic males teach in industrial courses and over 50% of White non-Hispanic males teach business courses, while 50% of all minority students who replied are enrolled in a business program and over 64% of all the Hispanic female students who responded, were enrolled in some type of a business program. The projected job market from ***Figure 1*** demonstrates the need for 200,000 new health care workers in Texas over a 15 year period ending in the year 2000. While more than 43% of the minority female faculty, who responded teach health occupations, only about 23% of the minority female students reported being in a health career program.

**RECOMMENDATIONS:**

1. Recruitment of minority students into health and public service related fields, be given increased emphasis in Texas.

2. The individual colleges should determine the distribution of minority students among their major divisions and focus student recruitment efforts toward projections for the job market in their area in conjunction with local and regional employers. Implementing goal 2 Master Plan for Vocational and Technical Education 1991 Update: "To provide flexible and timely technical education and training to meet the needs of employers for an employable, skilled work force."

## STUDENT SERVICES

**CONCLUSION:** **Remediation** programs currently in place received high rankings by faculty and students who use them. **Computer assisted instruction (CAI,s)** were rated lower than most other student services by both faculty and students.

**Counseling and Advising** were rated lower than most other services by both faculty and students. Admissions, counselors, and appropriate faculty will need to make a concerted effort in order to improve the conditions for student success. There was an 18% range between the lowest and highest averages for colleges. Each institution has its own peculiarities and therefore, must tailor its counseling and advising for its students.

**Special Student Services** either do not exist in some instances or are under used. Programs that serve special student populations resolve current and future problems that may arise, especially with minority students.

The majority of students at the colleges studied were female and 62% of all students were either married or single, head of household. Demographic projections are that this trend will increase, especially with increased participation in the work force by women and Hispanic women in particular. The students who rated **Child Care** out of this group rated it very low.

**Cafeteria** services were rated lower than any of the student services by students and faculty. Many students depend on cafeteria services when attending classes and working. The cafeteria also tends to be focal point for socialization on community college campuses and may be the only time that students interact with faculty and peers outside of class.

**Bookstores** were rated below every item on the student services except the cafeteria. There was a high (25 percentage points) difference between the highest and lowest ratings between two of the colleges, which indicates a large difference students perceptions of their bookstores. Comments that bookstore prices were too high were the most common. Some students stated that bookstore prices were higher than prices off campus, but financial aid required that they buy books and supplies at the college bookstore.

**RECOMMENDATIONS:**

1. Increase use of peer tutoring, peer and faculty mentoring, (especially using minority role models).
2. Computer assisted instruction involving remedial and skill areas relevant to students' needs to be further developed, using one successful computer assisted remediation models as the one used at Texas State Technical College at Harlingen.

3. Counseling should orient minority students toward success in their classroom performances and career ambitions.

4. Counseling programs include but not be limited to collaboration between instructors, administrators, and the students themselves. This expands on objective 3-a in the Master Plan for Vocational and Technical Education: 1991 Update: "To develop counselor/instructor partnerships across educational levels".

5. Specialized technical-occupational counselors would monitor each student, their progress, development, and academic standing. This fits into objective 4-c Master Plan for Vocational and Technical Education: 1991 Update: "To encourage technical education counselors to develop their knowledge about technical education and to enhance the application of their counseling skills."

6. Enhance existing programs such as El Paso Community College's "Health Careers in Occupational Program" (HCOP), other college prep activities that would allow students to acclimate themselves to their future college environment before actually entering a program and projects like Austin Community College's "Project Promise"

7. Increase visibility and availability of minority and women services as stated in objective 3-e in the Master Plan for Vocational and Technical Education: 1991 Update: "To provide access and acceptability of services for all students".

8. Establish child care services as stated in objective 3-e in the Master Plan for Vocational and Technical Education: 1991 Update: "To develop and expand student support services" This must be done through innovative and creative programs. Child care programs can be structured through the institution by establishing child care certificate programs supervised by qualified personnel and financed through funded programs. Using work study programs and work time spent in child care services in return for use of these services are two options that could be pursued.

9. Cafeteria services should reflect student population characteristics. They should serve food that is not only healthy, but also reflects ethnic content and personal choices at the lowest possible cost to students.

10. Provide a comfortable cafeteria or lounge area atmosphere conducive to enhancing socialization.

11. Bookstores should respond to the students' need for reasonable prices.

12. Individual colleges need to periodically reassess their contracts with bookstore operators in terms of student needs.

## FINANCIAL AID

**CONCLUSIONS:** During this time of dwindling funding at the State and National level for higher education, grants, loans and scholarships need to be administered in a manner to maximize student participation. The MOVED study showed student use of several funding sources, indicating that no current financial aid program is sufficient for the needs of students. Many technical/occupational programs are those that will pay very high salaries. Low interest loans to subsidize their education should be made available to students. A concept for altering the grant and loan system has come out of the MOVED staff discussions and discussions with educators in other colleges.

The MOVED study showed that work study programs have a very high approval rate by students and faculty. This factor would enhance the minority students opportunity for success by providing what Tinto and others referred to as "academic and social integration and increased involvement with the institution". This is especially important in colleges that have "commuter students" and limited social activities.

**RECOMMENDATIONS:**

1. Ensure that financial aid offices focus on being of optimal assistance to students.

2. Focus on scholarships, using private as well as government funded programs that reward exceptional students, using existing information banks. This would enhance objective 6-b in the Master Plan for Vocational and Technical Education: 1991 Update: "To increase the donation of business and industry resources to technical education".

3. Technical-occupational programs strive to make all financial aid in the form of loans, but forgive the loan, making it a grant, when the student successfully completes the program (this would tie the financial aid to successful completion rather than attendance or individual course grades and may also enhance the rate of completion in these programs).

4. Increase the use of work-study and job placement programs.

5. Job placement programs articulated between specific occupational specialty and a particular organization (company, hospital, etc.). This would further enhance objective 6-b and 5-a in the Master Plan for Vocational and Technical Education: 1991 Update: "To increase the donation of business and industry resources to technical education," and "To encourage private-public cooperative efforts to maximize use of use of education and training resources."

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# APPENDIX A

# PRELIMINARY STUDENT SURVEY

# EL PASO COMMUNITY COLLEGE

DEAR STUDENT,

We are surveying selected technical/vocational education students to get recommendations to make the college more responsive to your needs. The personal information given in this survey is strictly for the use of MOVED project staff and will remain confidential and will not be released to your school

Please tell us what you think is important, even if you think it is a problem only you have. We want you to answer as openly and completely as possible so that we do not overlook anything that is a problem to students.

Enrique Solis, PhD.
Vice President of Academic Affairs

**(NOTE: This cover letter was on EPCC letterhead)**

INSTRUCTIONS: Please answer the following questions as completely as possible. PLEASE PRINT where necessary, PLEASE USE AN [X] where requested. The personal information is exclusively for use as a means of identifying individuals for follow-up interviews and WILL NOT in any way affect the persons or academic or financial aid status at the institution that they are attending.

IDENTIFICATION:

Social Security Number: ____-____-________

College ID Number, If applicable: ________________________

NAME : ____________________________________________
LAST NAME FIRST NAME MIDDLE INITIAL

ADDRESS: ________________________________

CITY: ______________ ZIP: ________ PHONE: (____) __________

PLEASE CHECK ONLY ONE IN EACH OF THE FOLLOWING:

RACE/ETHNICITY

☐ White, Non-Hispanic
☐ Hispanic
☐ Black
☐ Native American
☐ Asian, Pacific Islander

GENDER:

☐ Male
☐ Female

AGE: _____

MARITAL STATUS:

☐ Married
☐ Single
☐ Single, Head of household

EDUCATIONAL BACKGROUND:

Please indicate the highest level of education you have currently achieved.

☐ Some high school
☐ High school diploma
☐ GED
☐ Some College
☐ Associate degree
☐ Bachelor's degree
☐ Master's degree
☐ Doctorate or Professional degree

Do you currently hold:

☐ Technical/Professional Certification: ____________________

Date of First Term Enrolled in Any College: Semester: ____ Year: _____

CURRENT COLLEGE INFORMATION:

What is the total number of credit hours or units for which you are currently enrolled at this college?

Number of credit hours: _____ or units: ______ ☐ Semester ☐ Quarter

What is your current grade point average (GPA) at this college?
(Use 4 point scale)

| B A | C | D | F |
|---|---|---|---|
| 3.0 - 4.0 ☐ | 2.0 - 2.9 ☐ | 1.0 - 1.9 ☐ | less than 1.0 ☐ |

BEST COPY AVAILABLE

Please list the things that your school or program DOES for you that help or make it easier for you to complete the program (for example bilingual programs, financial aid, tutoring, student activities etc.) Please rank them in order of importance to you as a student (most important is number 1, least important is number 10).

**NOTE: Ten double spaced lines were provided here.**

---

Please list other things that your school or program COULD DO to help or make it easier for you to complete the program. Again, Please rank them in order of importance to you as a student.

**NOTE: Ten double spaced lines were provided here.**

---

List reasons that you think classmates failed or dropped out of your program. Please rank from most often as number 1 to least often as number 10

**NOTE: Ten double spaced lines were provided here.**

---

Do you think at this time that you will complete this program? YES [ ] NO [ ]

If YES, why? if NO why not?

**NOTE: Ten double spaced lines were provided here.**

---

OTHER COMMENTS AND SUGGESTIONS

**NOTE: Twelve double spaced lines were provided here.**

# APPENDIX B

# PILOT FACULTY SURVEY

## PILOT FACULTY SURVEY
## ASSESSING MINORITY OPPORTUNITIES IN VOCATIONAL EDUCATION

**INSTRUCTIONS:** Please answer the following questions as completely as possible. PLEASE PRINT where necessary, PLEASE USE AN [X] where requested. On some of the questions you are asked to rate an item. Please use the following scale for this rating:

**IDENTIFICATION:**PLEASE VERIFY

LAST NAME:____________________ FIRST NAME:_________________ MI:___

CAMPUS ISC: CSC [ ] RG [ ] VV [ ] TM [ ]

PHONE:______________________________________________________________
OFFICE HOME (optional)

**PLEASE CHECK ONLY ONE IN EACH OF THE FOLLOWING:**

**RACE/ETHNICITY**
White, Non-Hispanic [ ]
Hispanic [ ]
Black, Non-Hispanic [ ]
Native American [ ]
Asian, Pacific Islander [ ]

**GENDER:**
Male [ ]
Female [ ]

**AGE IN YEARS**
25 - 34 [ ]
35 - 44 [ ]
45 - 54 [ ]
55 - 64 [ ]
More than 65 [ ]

**MARITAL STATUS:**
Married [ ]
Single [ ]
Single, Head of household [ ]

**EDUCATIONAL BACKGROUND:**

Please indicate the highest level of education you have achieved.

Below high school level [ ]
Some high school [ ]
High school diploma [ ]
GED [ ]
Some College [ ]
Associate's Degree [ ]
Bachelor's degree [ ]
Master's (in specialty) [ ]
Master's (other) [ ]
Professional Degree [ ]
Doctorate [ ]

**RATING SCALE**
**[1] Excellent [2] Very good [3] Average [4] Poor [5] Very poor**

TECHNICAL/PROFESSIONAL LICENSES OR CERTIFICATES

Are you now Licensed or Certified? Yes ☐ No ☐

Please Specify________________________________________________

**CURRENT COLLEGE INFORMATION:**

Date of First Started teaching in This Program:

Before 1980 ☐
1980 - 1984 ☐
1985 - 1987 ☐
1988 ☐
1989 ☐

Please give reason you believe most students are in your program:

Get a job ☐
Improve skills needed in current job ☐
Earn a one-year certificate ☐
Earn a two-year college degree ☐
Transfer to a four-year college ☐
Personal interest ☐

**BASIC SKILLS ASSESSMENTS:**

Have your students taken the TASP (Texas Academic Skills Program) tests? YES ☐ NO ☐

Have they taken other tests for basic skills? YES ☐ NO ☐

Were they required to take courses/special programs to upgrade their skills, please rate how much these courses/programs help them in their courses now:

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ |

If they have taken English as Second Language (ESL) courses please rate how much they help them in their current courses:

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ |

**RATING SCALE**

**[1] Excellent [2] Very good [3] Average [4] Poor [5] Very poor**

**SATISFACTION WITH COLLEGE/PROGRAM:**

Please rate your program in the following areas:

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Quality of instruction | ☐ | ☐ | ☐ | ☐ | ☐ |
| Grading/testing | ☐ | ☐ | ☐ | ☐ | ☐ |
| Content of courses | ☐ | ☐ | ☐ | ☐ | ☐ |
| Class size | ☐ | ☐ | ☐ | ☐ | ☐ |
| Days/times class meets | ☐ | ☐ | ☐ | ☐ | ☐ |
| Class location/s | ☐ | ☐ | ☐ | ☐ | ☐ |
| Counseling/advisement services | ☐ | ☐ | ☐ | ☐ | ☐ |
| Hands on laboratories | ☐ | ☐ | ☐ | ☐ | ☐ |
| Quality of equipment available | ☐ | ☐ | ☐ | ☐ | ☐ |
| Equipment/student ratio | ☐ | ☐ | ☐ | ☐ | ☐ |
| Practical experience (OJT or Clinical) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Library/Learning centers | ☐ | ☐ | ☐ | ☐ | ☐ |
| Audio/visual equipment/supplies | ☐ | ☐ | ☐ | ☐ | ☐ |
| Computer Aided Instruction (CAI's) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Bookstore (Hours/Supplies/Locations) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Cafeterias | ☐ | ☐ | ☐ | ☐ | ☐ |
| Registration Process | ☐ | ☐ | ☐ | ☐ | ☐ |
| Business/Registrar's offices | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other ______________________________ (specify) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other ______________________________ (specify) | ☐ | ☐ | ☐ | ☐ | ☐ |

**QUALITIES OF A GOOD INSTRUCTOR**

Please prioritize the top 10 for your students, by placing a number in the box following each item (1) being most important and (10) being least important.

Instructors that:

| | |
|---|---|
| Are knowledgeable. | ☐ |
| Have practical experience in field they are teaching. | ☐ |
| Are available to students, outside of class. | ☐ |
| Are supportive to students. | ☐ |
| Maintain high standards for students. | ☐ |
| Are easy to approach. | ☐ |
| Are considered firm but fair. | ☐ |
| Are minority role models. | ☐ |
| Are bilingual. | ☐ |
| Are culturally aware. | ☐ |
| Other (specify) ____________________________________________ | ☐ |
| Other (specify) ____________________________________________ | ☐ |

**RATING SCALE**

**[1] Excellent [2] Very good [3] Average [4] Poor [5] Very poor**

**FINANCIAL AID SERVICES**
If your students have used any of these services, Please rate them.

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Grants: | | | | | |
| Pell | ☐ | ☐ | ☐ | ☐ | ☐ |
| Private Industry Council (PIC) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Veterans Administration benefits | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other (specify)________________ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other (specify)________________ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Loans: | ☐ | ☐ | ☐ | ☐ | ☐ |
| Emergency loans | ☐ | ☐ | ☐ | ☐ | ☐ |
| Federal student loans | ☐ | ☐ | ☐ | ☐ | ☐ |
| Veterans Administrations loans | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other (specify)________________ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other (specify)________________ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Scholarships: | | | | | |
| Locally funded | ☐ | ☐ | ☐ | ☐ | ☐ |
| Academic | ☐ | ☐ | ☐ | ☐ | ☐ |
| School/program funded | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other (specify)________________ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other (specify)________________ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Work Study programs | ☐ | ☐ | ☐ | ☐ | ☐ |
| Job placement services | ☐ | ☐ | ☐ | ☐ | ☐ |

**SPECIAL NEEDS:**
If your students have used any of these services, Please rate them.

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Handicapped student services | ☐ | ☐ | ☐ | ☐ | ☐ |
| Language lab | ☐ | ☐ | ☐ | ☐ | ☐ |
| Tutoring (Basic skills) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Tutoring (Subject specific) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Math skills program | ☐ | ☐ | ☐ | ☐ | ☐ |
| Study skills program | ☐ | ☐ | ☐ | ☐ | ☐ |
| Personal Counseling services | ☐ | ☐ | ☐ | ☐ | ☐ |
| Minority Student services | ☐ | ☐ | ☐ | ☐ | ☐ |
| Women Student services | ☐ | ☐ | ☐ | ☐ | ☐ |
| Child care facilities | ☐ | ☐ | ☐ | ☐ | ☐ |
| Bilingual vocational programs | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other (specify)________________ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other (specify)________________ | ☐ | ☐ | ☐ | ☐ | ☐ |

Please list the priority of attributes of students who you feel will complete the program. Please put the number of importance for your students on the ten (10) most important items to you personally. Number [1] as most important, number [10] as least important.

They are personally motivated [ ]
They are interested in this subject [ ]
They study hard [ ]
They want a better paying job [ ]
They want a job that they can be proud of [ ]
They enjoy the classes [ ]
They attend class regularly [ ]
They have instructor support [ ]
They have support from other students [ ]
They have family support [ ]
They keep their work up to date [ ]
They have financial support (personal) [ ]
They have financial aid [ ]
The course is required for their job [ ]
Their sponsor requires this course [ ]
They don't want to waste money [ ]
They don't want to waste time [ ]
They have good basic college skills (math, reading, etc.) [ ]

Other (specify)________________________________________ [ ]

**COMMENTS AND SUGGESTIONS**

Please make any comments or suggestions that you feel would be helpful to the MOVED staff. Include comments regarding the questionnaire and any other suggestions which may be of help when we distribute this questionnaire to your colleagues statewide.

# APPENDIX C

# MINORITY FACULTY SURVEY

## ASSESSING MINORITY OPPORTUNITIES IN VOCATIONAL EDUCATION

## FACULTY SURVEY

INSTRUCTIONS: Please answer the following questions as completely as possible. PLEASE PRINT where necessary, PLEASE USE AN [X] where requested.

**IDENTIFICATION: PLEASE VERIFY.**

LAST NAME:________________________ FIRST NAME:________________________MI:____

PHONE:____________ ____________
OFFICE

**PLEASE CHECK ONLY ONE IN EACH OF THE FOLLOWING:**

**RACE/ETHNICITY**
Hispanic
Mexican-American.......☐
Puerto Rican...........☐
Cuban-American.........☐
Central American.......☐
Black-Hispanic.........☐
African-American.......☐

**GENDER:**
Male....☐
Female..☐

**AGE IN YEARS:**
25 - 34........☐
35 - 44........☐
45 - 54........☐
55 - 64........☐
More than 65...☐

**MARITAL STATUS:**
Married...................☐
Single....................☐
Single, Head of Household.☐

**EDUCATIONAL BACKGROUND:**

Please indicate the highest level of education you have achieved.

GED.................☐
High School Diploma.☐
Some College........☐
Associates degree...........☐
Bachelor's degree...........☐
Master's (in specialty).....☐
Master's degree (other).....☐
Professional Degree.........☐
Doctorate...................☐

**TECHNICAL/PROFESSIONAL LICENSES OR CERTIFICATES**

Are you now Licensed or Certified in Area that you are teaching? Yes ☐ No ☐

**CURRENT COLLEGE INFORMATION:**

Title of program that you teach?____________________________________

Date of First Started teaching in THIS Program:

Before 1978.....☐
1978 - 1982.....☐
1983-85.....☐
1986-87.....☐
1988......☐
1989......☐

---

**RATING SCALE**

**[1] NOT IMPORTANT [2] NOT VERY IMPORTANT [3] IMPORTANT [4] VERY IMPORTANT [5] ESSENTIAL**

---

Using the scale above, please give reasons you believe most minority students are in your program, by importance to them.

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Get a job.......... | ☐ | ☐ | ☐ | ☐ | ☐ |
| Improve skills needed in current job.......... | ☐ | ☐ | ☐ | ☐ | ☐ |
| Earn a one-year certificate.......... | ☐ | ☐ | ☐ | ☐ | ☐ |
| Earn a two-year college degree.......... | ☐ | ☐ | ☐ | ☐ | ☐ |
| Transfer to a four-year college.......... | ☐ | ☐ | ☐ | ☐ | ☐ |
| Personal interest.......... | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other?____________________ (specify) | ☐ | ☐ | ☐ | ☐ | ☐ |

## ASSESSING MINORITY OPPORTUNITIES IN VOCATIONAL EDUCATION

## FACULTY SURVEY

---

**RATING SCALE**

| | | | | |
|---|---|---|---|---|
| [1] VERY POOR | [2] POOR | [3] AVERAGE | [4] VERY GOOD | [5] EXCELLENT |

---

**BASIC SKILLS ASSESSMENTS:**

Have your minority students taken the TASP (Texas Academic Skills Program) tests? YES ☐ NO ☐

Have they taken other tests for basic skills? YES ☐ NO ☐

If they were required to take courses/special programs to upgrade their skills, please rate how much these courses/programs help them in their courses now:

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Mathematics | ☐ | ☐ | ☐ | ☐ | ☐ |
| Reading | ☐ | ☐ | ☐ | ☐ | ☐ |
| Writing | ☐ | ☐ | ☐ | ☐ | ☐ |
| Study Skills | ☐ | ☐ | ☐ | ☐ | ☐ |
| English as Second Language (ESL) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other?____________________ (specify) | ☐ | ☐ | ☐ | ☐ | ☐ |

**SATISFACTION WITH PROGRAM/COLLEGE:**

Please rate your program, from your minority students' point of view, in the following areas, using the scale above:

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Quality of instruction | ☐ | ☐ | ☐ | ☐ | ☐ |
| Grading/testing | ☐ | ☐ | ☐ | ☐ | ☐ |
| Content of courses | ☐ | ☐ | ☐ | ☐ | ☐ |
| Class size | ☐ | ☐ | ☐ | ☐ | ☐ |
| Days/times class meets | ☐ | ☐ | ☐ | ☐ | ☐ |
| Class location/s | ☐ | ☐ | ☐ | ☐ | ☐ |
| Counseling/Advisement Services | ☐ | ☐ | ☐ | ☐ | ☐ |
| Hands on laboratories | ☐ | ☐ | ☐ | ☐ | ☐ |
| Quality of equipment available | ☐ | ☐ | ☐ | ☐ | ☐ |
| Equipment/student ratio | ☐ | ☐ | ☐ | ☐ | ☐ |
| Practical experience (OJT or Clinical) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Library/Learning Centers | ☐ | ☐ | ☐ | ☐ | ☐ |
| Audio/visual equipment/supplies | ☐ | ☐ | ☐ | ☐ | ☐ |
| Computer Aided Instruction (CAI's) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Bookstore (hours/supplies/locations) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Cafeterias | ☐ | ☐ | ☐ | ☐ | ☐ |
| Registration Process | ☐ | ☐ | ☐ | ☐ | ☐ |
| Business/Registrar's offices | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other?____________________ (specify) | ☐ | ☐ | ☐ | ☐ | ☐ |

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# ASSESSING MINORITY OPPORTUNITIES IN VOCATIONAL EDUCATION

## FACULTY SURVEY

---

**RATING SCALE**

**[1] NOT IMPORTANT [2] NOT VERY IMPORTANT [3] IMPORTANT [4] VERY IMPORTANT [5] ESSENTIAL**

---

### QUALITIES OF A GOOD INSTRUCTOR

Please rate the importance of the following items related to instructors, from your minority students' point of view, using the scale above:

Instructors that:

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Are knowledgeable | ☐ | ☐ | ☐ | ☐ | ☐ |
| Have practical experience in field they are teaching | ☐ | ☐ | ☐ | ☐ | ☐ |
| Are available to students, outside of class | ☐ | ☐ | ☐ | ☐ | ☐ |
| Are supportive to students | ☐ | ☐ | ☐ | ☐ | ☐ |
| Maintain high standards for students | ☐ | ☐ | ☐ | ☐ | ☐ |
| Are easy to approach | ☐ | ☐ | ☐ | ☐ | ☐ |
| Are considered firm but fair | ☐ | ☐ | ☐ | ☐ | ☐ |
| Are minority role models | ☐ | ☐ | ☐ | ☐ | ☐ |
| Are bilingual | ☐ | ☐ | ☐ | ☐ | ☐ |
| Are culturally aware | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other? (specify) ________________ | ☐ | ☐ | ☐ | ☐ | ☐ |

---

**RATING SCALE**

**[1] VERY POOR [2] POOR [3] AVERAGE [4] VERY GOOD [5] EXCELLENT**

---

### FINANCIAL AID SERVICES

If your students have used any of these services, Please rate them.

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Grants: | | | | | |
| Pell | ☐ | ☐ | ☐ | ☐ | ☐ |
| Private Industry Council (PIC) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Veterans Administration benefits | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other? (specify) ________________ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Loans: | | | | | |
| Emergency loans | ☐ | ☐ | ☐ | ☐ | ☐ |
| Federal student loans | ☐ | ☐ | ☐ | ☐ | ☐ |
| Veterans Administrations loans | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other? (specify) ________________ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Scholarships: | | | | | |
| Locally funded | ☐ | ☐ | ☐ | ☐ | ☐ |
| Academic | ☐ | ☐ | ☐ | ☐ | ☐ |
| School/program funded | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other? (specify) ________________ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Work Study programs | ☐ | ☐ | ☐ | ☐ | ☐ |
| Job placement services | ☐ | ☐ | ☐ | ☐ | ☐ |

## ASSESSING MINORITY OPPORTUNITIES IN VOCATIONAL EDUCATION

## FACULTY SURVEY

---

**RATING SCALE**

**[1] VERY POOR** **[2] POOR** **[3] AVERAGE** **[4] VERY GOOD** **[5] EXCELLENT**

---

**SPECIAL NEEDS:**

If your minority students have used any of these services, please rate them, according to the scale above.

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Handicapped student services | ☐ | ☐ | ☐ | ☐ | ☐ |
| Language lab | ☐ | ☐ | ☐ | ☐ | ☐ |
| Tutoring (Basic skills) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Tutoring (Subject specific) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Math skills program | ☐ | ☐ | ☐ | ☐ | ☐ |
| Study skills program | ☐ | ☐ | ☐ | ☐ | ☐ |
| Personal Counseling Services | ☐ | ☐ | ☐ | ☐ | ☐ |
| Minority Student Services | ☐ | ☐ | ☐ | ☐ | ☐ |
| Women Student Services | ☐ | ☐ | ☐ | ☐ | ☐ |
| Child care facilities | ☐ | ☐ | ☐ | ☐ | ☐ |
| Bilingual vocational programs | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other? ____________ (specify) | ☐ | ☐ | ☐ | ☐ | ☐ |

---

**RATING SCALE**

**[1] NOT IMPORTANT** **[2] NOT VERY IMPORTANT** **[3] IMPORTANT** **[4] VERY IMPORTANT** **[5] ESSENTIAL**

---

Please identify the importance of attributes of minority students who you feel will complete the program, using the scale above to rate each item:

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| They are personally motivated | ☐ | ☐ | ☐ | ☐ | ☐ |
| They are interested in this subject | ☐ | ☐ | ☐ | ☐ | ☐ |
| They study hard | ☐ | ☐ | ☐ | ☐ | ☐ |
| They want a better paying job | ☐ | ☐ | ☐ | ☐ | ☐ |
| They want a job that they can be proud of | ☐ | ☐ | ☐ | ☐ | ☐ |
| They enjoy the classes | ☐ | ☐ | ☐ | ☐ | ☐ |
| They attend class regularly | ☐ | ☐ | ☐ | ☐ | ☐ |
| They have instructor support | ☐ | ☐ | ☐ | ☐ | ☐ |
| They have support from other students | ☐ | ☐ | ☐ | ☐ | ☐ |
| They have family support | ☐ | ☐ | ☐ | ☐ | ☐ |
| They keep their work up to date | ☐ | ☐ | ☐ | ☐ | ☐ |
| They have personal financial resources | ☐ | ☐ | ☐ | ☐ | ☐ |
| They have financial aid | ☐ | ☐ | ☐ | ☐ | ☐ |
| The course is required for their job | ☐ | ☐ | ☐ | ☐ | ☐ |
| Their sponsor requires this course | ☐ | ☐ | ☐ | ☐ | ☐ |
| They don't want to waste money | ☐ | ☐ | ☐ | ☐ | ☐ |
| They don't want to waste time | ☐ | ☐ | ☐ | ☐ | ☐ |
| They have good basic college skills (math, reading, writing, etc.) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other? ____________ (specify) | ☐ | ☐ | ☐ | ☐ | ☐ |

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## ASSESSING MINORITY OPPORTUNITIES IN VOCATIONAL EDUCATION

## FACULTY SURVEY

**COMMENTS AND SUGGESTIONS:**

Please make any comments or suggestions that you feel would be helpful to the MOVED project staff.

# APPENDIX D

# NON-MINORITY STUDENT SURVEY

## ASSESSING OPPORTUNITIES IN VOCATIONAL EDUCATION

## STUDENT SURVEY

**INSTRUCTIONS:** Please answer the following questions as completely as possible. PLEASE PRINT where necessary, PLEASE USE AN [X] where requested.

**IDENTIFICATION:** PLEASE VERIFY.

LAST NAME:____________________ FIRST NAME:____________________ MI:____

HOME ADDRESS:________________________________________

CITY:____________________ ZIP:__________ PHONE:_______________

**PLEASE CHECK ONLY ONE IN EACH OF THE FOLLOWING:**

**GENDER:**
Male....☐
Female..☐

**AGE RANGE IN YEARS:**
Less than 20...☐
20 - 24........☐
25 - 34........☐
35 - 44........☐
45 - 54........☐
55 - 64........☐
More than 64...☐

**MARITAL STATUS:**
Married....................☐
Single.....................☐
Single, Head of Household.☐

**EDUCATIONAL BACKGROUND:**

Please indicate the highest level of education you had completed **BEFORE** entering the program your are in now.

Less than High School..☐
Some High school.......☐
GED....................☐
High School Diploma....☐
Some College..................☐
Associates degree.............☐
Bachelor's degree (or more)..☐

Are you now **CURRENTLY** Licensed or Certified in **ANY** area? Yes ☐ No ☐

**CURRENT COLLEGE INFORMATION:**

Title of your program?____________________________________

Your major?____________________________________

Date you FIRST started in THIS Program:

Before 1984.....☐
1984............☐
1985.....☐
1986.....☐
1987.....☐
1988.....☐
1989......☐
1990......☐

Using the scale below, please rate reasons you are in your program.

---

**RATING SCALE**

**[1] NOT NECESSARY [2] NOT VERY IMPORTANT [3] IMPORTANT [4] VERY IMPORTANT [5] ESSENTIAL**

---

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Get a job.......... | ☐ | ☐ | ☐ | ☐ | ☐ |
| Improve skills needed in current job.......... | ☐ | ☐ | ☐ | ☐ | ☐ |
| Earn a one-year certificate.......... | ☐ | ☐ | ☐ | ☐ | ☐ |
| Earn a two-year college degree.......... | ☐ | ☐ | ☐ | ☐ | ☐ |
| Transfer to a four-year college.......... | ☐ | ☐ | ☐ | ☐ | ☐ |
| Personal interest.......... | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other?(specify)____________________ | ☐ | ☐ | ☐ | ☐ | ☐ |

## ASSESSING OPPORTUNITIES IN VOCATIONAL EDUCATION

### STUDENT SURVEY

**BASIC SKILLS ASSESSMENTS:**

Have you taken the TASP (Texas Academic Skills Program) tests? YES ☐ NO ☐

Have you taken other tests for basic skills? YES ☐ NO ☐

If you were required to take courses/special programs to upgrade your skills, please rate these courses/programs in terms of help to you in your courses now (use rating scale below):

---

**RATING SCALE**

[1] VERY POOR [2] POOR [3] AVERAGE [4] GOOD [5] VERY GOOD

---

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Mathematics | ☐ | ☐ | ☐ | ☐ | ☐ |
| Reading | ☐ | ☐ | ☐ | ☐ | ☐ |
| Writing | ☐ | ☐ | ☐ | ☐ | ☐ |
| Study Skills | ☐ | ☐ | ☐ | ☐ | ☐ |
| English as Second Language (ESL) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other?________________ (specify) | ☐ | ☐ | ☐ | ☐ | ☐ |

**SATISFACTION WITH PROGRAM/COLLEGE:**

Please rate your program in the following areas, using the scale above:

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Quality of instruction | ☐ | ☐ | ☐ | ☐ | ☐ |
| Grading/testing | ☐ | ☐ | ☐ | ☐ | ☐ |
| Content of courses | ☐ | ☐ | ☐ | ☐ | ☐ |
| Class size | ☐ | ☐ | ☐ | ☐ | ☐ |
| Days/times class meets | ☐ | ☐ | ☐ | ☐ | ☐ |
| Class location/s | ☐ | ☐ | ☐ | ☐ | ☐ |
| Counseling/Advisement Services | ☐ | ☐ | ☐ | ☐ | ☐ |
| Hands on laboratories | ☐ | ☐ | ☐ | ☐ | ☐ |
| Quality of equipment available | ☐ | ☐ | ☐ | ☐ | ☐ |
| Equipment/student ratio | ☐ | ☐ | ☐ | ☐ | ☐ |
| Practical experience (OJT or Clinical) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Library/Learning Centers | ☐ | ☐ | ☐ | ☐ | ☐ |
| Audio/visual equipment/supplies | ☐ | ☐ | ☐ | ☐ | ☐ |
| Computer Aided Instruction (CAI's) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Bookstore (hours/supplies/locations) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Cafeterias | ☐ | ☐ | ☐ | ☐ | ☐ |
| Registration Process | ☐ | ☐ | ☐ | ☐ | ☐ |
| Business/Registrar's offices | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other?________________ (specify) | ☐ | ☐ | ☐ | ☐ | ☐ |

## ASSESSING OPPORTUNITIES IN VOCATIONAL EDUCATION

## STUDENT SURVEY

**QUALITIES OF A GOOD INSTRUCTOR**
Please rate the qualities of what you think make a good instructor, using the scale below:

---

**RATING SCALE**

**[1] NOT NECESSARY [2] NOT VERY IMPORTANT [3] IMPORTANT [4] VERY IMPORTANT [5] ESSENTIAL**

---

| Instructors that: | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Have high level of technical knowledge | ☐ | ☐ | ☐ | ☐ | ☐ |
| Have practical experience in field they are teaching | ☐ | ☐ | ☐ | ☐ | ☐ |
| Are available to students, outside of class | ☐ | ☐ | ☐ | ☐ | ☐ |
| Are supportive to students | ☐ | ☐ | ☐ | ☐ | ☐ |
| Maintain high standards for students | ☐ | ☐ | ☐ | ☐ | ☐ |
| Are easy to approach | ☐ | ☐ | ☐ | ☐ | ☐ |
| Are considered firm but fair | ☐ | ☐ | ☐ | ☐ | ☐ |
| Are role models | ☐ | ☐ | ☐ | ☐ | ☐ |
| Are bilingual | ☐ | ☐ | ☐ | ☐ | ☐ |
| Are culturally aware | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other? (specify) ____________ | ☐ | ☐ | ☐ | ☐ | ☐ |

**FINANCIAL AID SERVICES:**
If YOU have used any of these services, please rate them, using the scale below.

---

**RATING SCALE**

**[1] VERY POOR [2] POOR [3] AVERAGE [4] GOOD [5] VERY GOOD**

---

Have you received a Grant: YES ☐ NO ☐

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Pell | ☐ | ☐ | ☐ | ☐ | ☐ |
| Private Industry Council (PIC) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Veterans Administration benefits | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other? (specify) ____________ | ☐ | ☐ | ☐ | ☐ | ☐ |

Have you received a Student Loan: YES ☐ NO ☐

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Emergency loans | ☐ | ☐ | ☐ | ☐ | ☐ |
| Federal student loans | ☐ | ☐ | ☐ | ☐ | ☐ |
| Veterans Administrations loans | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other? (specify) ____________ | ☐ | ☐ | ☐ | ☐ | ☐ |

Have you received a Scholarship: YES ☐ NO ☐

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Locally funded | ☐ | ☐ | ☐ | ☐ | ☐ |
| Academic | ☐ | ☐ | ☐ | ☐ | ☐ |
| School/program funded | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other? (specify) ____________ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Work Study programs | ☐ | ☐ | ☐ | ☐ | ☐ |
| Temporary job placement services | ☐ | ☐ | ☐ | ☐ | ☐ |

## ASSESSING OPPORTUNITIES IN VOCATIONAL EDUCATION

## STUDENT SURVEY

SPECIAL NEEDS:

If YOU have used any of the services listed, please rate them, according to the scale below.

---

**RATING SCALE**

**[1] VERY POOR [2] POOR [3] AVERAGE [4] GOOD [5] VERY GOOD**

---

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Handicapped student services | ☐ | ☐ | ☐ | ☐ | ☐ |
| Language lab | ☐ | ☐ | ☐ | ☐ | ☐ |
| Tutoring (Basic skills) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Tutoring (Subject specific) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Math skills program | ☐ | ☐ | ☐ | ☐ | ☐ |
| Study skills program | ☐ | ☐ | ☐ | ☐ | ☐ |
| Personal Counseling Services | ☐ | ☐ | ☐ | ☐ | ☐ |
| Special Student Services | ☐ | ☐ | ☐ | ☐ | ☐ |
| Women Student Services | ☐ | ☐ | ☐ | ☐ | ☐ |
| Child care facilities | ☐ | ☐ | ☐ | ☐ | ☐ |
| Bilingual vocational programs | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other? ____________________ (specify) | ☐ | ☐ | ☐ | ☐ | ☐ |

**REASONS FOR SUCCESS**

Do YOU at this time think that you will complete your current program?....YES ☐ NO ☐

Please identify by importance reasons you will complete your program, using the scale above to rate each item:

---

**RATING SCALE**

**[1] NOT NEEDED [2] NOT VERY IMPORTANT [3] IMPORTANT [4] VERY IMPORTANT [5] ESSENTIAL**

---

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| I am personally motivated | ☐ | ☐ | ☐ | ☐ | ☐ |
| I am interested in this subject | ☐ | ☐ | ☐ | ☐ | ☐ |
| I study hard | ☐ | ☐ | ☐ | ☐ | ☐ |
| I want a better paying job | ☐ | ☐ | ☐ | ☐ | ☐ |
| I want a job that I can be proud of | ☐ | ☐ | ☐ | ☐ | ☐ |
| I enjoy the classes | ☐ | ☐ | ☐ | ☐ | ☐ |
| I attend class regularly | ☐ | ☐ | ☐ | ☐ | ☐ |
| I have support from instructors | ☐ | ☐ | ☐ | ☐ | ☐ |
| I have support from other students | ☐ | ☐ | ☐ | ☐ | ☐ |
| I have family support | ☐ | ☐ | ☐ | ☐ | ☐ |
| I keep my class work up to date | ☐ | ☐ | ☐ | ☐ | ☐ |
| I have personal financial resources | ☐ | ☐ | ☐ | ☐ | ☐ |
| I have financial aid | ☐ | ☐ | ☐ | ☐ | ☐ |
| The course is required for my job | ☐ | ☐ | ☐ | ☐ | ☐ |
| My financial sponsor requires this course | ☐ | ☐ | ☐ | ☐ | ☐ |
| I don't want to waste money | ☐ | ☐ | ☐ | ☐ | ☐ |
| I don't want to waste time | ☐ | ☐ | ☐ | ☐ | ☐ |
| I have good basic college skills (math, reading, writing, etc.) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other? ____________________ (specify) | ☐ | ☐ | ☐ | ☐ | ☐ |

# ASSESSING OPPORTUNITIES IN VOCATIONAL EDUCATION

## STUDENT SURVEY

**COMMENTS AND SUGGESTIONS:**

Please make any comments or suggestions that you feel would be helpful to the MOVED project staff.

# APPENDIX E

## RANKING* COMPARISONS FOR PERCEPTIONS OF REASONS STUDENTS ENTER TECHNICAL-OCCUPATIONAL PROGRAMS

. Ranking is based on Kendall's Coefficient of Concordance Mean Ranks

| | Minority | | | | | White Non-Hispanic | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Variable Labels | 425 Students | | | | | 581 Students | | | | |
| COLLEGE | A | B | C | D | E | A | B | C | D | E |
| PERSONAL INTEREST | 2 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| GET A JOB | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 |
| EARN A 2-YEAR DEGREE | 3 | 3 | 4 | 1 | 3 | 3 | 3 | 5 | 3 | 4 |
| IMPROVE CURRENT JOB SKILLS | 3 | 5 | 5 | 4 | 4 | 5 | 4 | 2 | 4 | 2 |
| EARN 1-YEAR CERTIFICATE | 5 | 5 | 5 | 4 | 4 | 6 | 6 | 6 | 5 | 6 |
| TRANSFER TO 4-YEAR COLLEGE | 6 | 4 | 3 | 5 | 5 | 4 | 5 | 2 | 6 | 5 |
| Variable Labels | 224 Faculty | | | | | 342 Faculty | | | | |
| COLLEGE | A | B | C | D | E | A | B | C | D | E |
| PERSONAL INTEREST | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 4 | 4 |
| GET A JOB | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| EARN A 2-YEAR DEGREE | 2 | 3 | 2 | 3 | 5 | 2 | 4 | 3 | 3 | 3 |
| IMPROVE CURRENT JOB SKILLS | 3 | 2 | 3 | 2 | 2 | 4 | 2 | 2 | 2 | 2 |
| EARN 1-YEAR CERTIFICATE | 4 | 4 | 5 | 6 | 4 | 5 | 5 | 6 | 6 | 6 |
| TRANSFER TO 4-YEAR COLLEGE | 6 | 6 | 6 | 5 | 6 | 6 | 6 | 3 | 5 | 5 |

*Table 10 Reasons Students Enter by College*

# APPENDIX F

# RANKING COMPARISONS FOR PERCEPTIONS OF QUALITIES OF A GOOD INSTRUCTOR

*Ranking is based on Kendall's Coefficient of Concordance Mean Ranks

| | Minority | | | | | White Non-Hispanic | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| COLLEGE | A | B | C | D | E | A | B | C | D | E |
| Variable Labels | 425 Students | | | | | 581 Students | | | | |
| PRACTICAL EXPERIENCE | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TECHNICAL KNOWLEDGE | 2 | 2 | 4 | 3 | 3 | 3 | 2 | 4 | 2 | 4 |
| EASY TO APPROACH | 5 | 3 | 3 | 3 | 3 | 5 | 4 | 2 | 4 | 2 |
| SUPPORTIVE | 4 | 4 | 2 | 2 | 5 | 4 | 4 | 2 | 4 | 3 |
| MAINTAIN HIGH STANDARDS | 3 | 6 | 4 | 6 | 2 | 4 | 5 | 5 | 5 | 6 |
| FIRM BUT FAIR | 7 | 4 | 4 | 3 | 6 | 4 | 6 | 6 | 4 | 5 |
| AVAILABLE | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 |
| CULTURALLY AWARE | 8 | 7 | 8 | 9 | 8 | 9 | 9 | 9 | 9 | 9 |
| MINORITY (ROLE MODELS)* | 10 | 9 | 9 | 8 | 9 | 8 | 8 | 8 | 8 | 7 |
| BILINGUAL | 9 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Variable Labels | 224 Faculty | | | | | 342 Faculty | | | | |
| PRACTICAL EXPERIENCE | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 |
| TECHNICAL KNOWLEDGE | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 4 | 2 | 4 |
| EASY TO APPROACH | 6 | 6 | 7 | 6 | 6 | 5 | 3 | 3 | 4 | 3 |
| SUPPORTIVE | 4 | 5 | 2 | 4 | 4 | 4 | 4 | 2 | 3 | 5 |
| MAINTAIN HIGH STANDARDS | 5 | 2 | 4 | 5 | 3 | 3 | 6 | 5 | 5 | 2 |
| FIRM BUT FAIR | 7 | 4 | 6 | 7 | 5 | 7 | 4 | 6 | 6 | 6 |
| AVAILABLE | 3 | 7 | 9 | 8 | 8 | 6 | 7 | 7 | 7 | 7 |
| CULTURALLY AWARE | 9 | 9 | 8 | 9 | 9 | 8 | 8 | 8 | 8 | 8 |
| MINORITY (ROLE MODELS)* | 8 | 8 | 3 | 3 | 7 | 10 | 9 | 9 | 9 | 9 |
| BILINGUAL | 10 | 10 | 10 | 10 | 10 | 9 | 10 | 10 | 10 | 10 |

***Table 11_ Note: * WHITE STUDENTS WERE ASKED ONLY (ROLE MODEL)***

# APPENDIX G

# RANKING COMPARISONS OF FACULTY PERCEPTIONS FOR WHY STUDENTS WILL COMPLETE TECHNICAL-OCCUPATIONAL PROGRAM

*Ranking is based on Kendall's Coefficient of Concordance Mean Ranks

| Variable Labels | Minority | | | | | White non-Hispanic | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| College | A | B | C | D | E | A | B | C | D | E |
| WANT JOB TO BE PROUD OF | 2 | 4 | 5 | 13 | 6 | 6 | 5 | 7 | 8 | 9 |
| WANT BETTER PAYING JOB | 1 | 2 | 4 | 9 | 2 | 6 | 8 | 9 | 9 | 7 |
| INTERESTED IN THE SUBJECT | 6 | 6 | 3 | 2 | 4 | 4 | 1 | 3 | 4 | 2 |
| ATTEND CLASS REGULARLY | 4 | 5 | 6 | 4 | 3 | 3 | 6 | 5 | 2 | 4 |
| PERSONALLY MOTIVATED | 3 | 3 | 2 | 1 | 5 | 1 | 3 | 1 | 1 | 1 |
| KEEP CLASS WORK UP TO DATE | 9 | 7 | 7 | 5 | 7 | 2 | 7 | 10 | 3 | 5 |
| DON'T WANT TO WASTE TIME | 13 | 11 | 11 | 8 | 13 | 13 | 4 | 12 | 13 | 12 |
| FAMILY SUPPORT | 10 | 9 | 16 | 10 | 9 | 9 | 12 | 10 | 11 | 11 |
| GOOD BASIC COLLEGE SKILLS | 12 | 13 | 10 | 6 | 16 | 9 | 10 | 8 | 7 | 7 |
| STUDY HARD | 11 | 8 | 8 | 7 | 10 | 8 | 15 | 6 | 6 | 6 |
| DON'T WANT TO WASTE MONEY | 13 | 11 | 11 | 8 | 13 | 17 | 16 | 15 | 15 | 14 |
| INSTRUCTOR SUPPORT | 5 | 1 | 1 | 3 | 1 | 4 | 2 | 2 | 5 | 2 |
| ENJOY CLASSES | 14 | 10 | 9 | 11 | 11 | 12 | 10 | 11 | 9 | 10 |
| FINANCIAL AID | 7 | 14 | 12 | 15 | 17 | 11 | 13 | 16 | 18 | 17 |
| PERSONAL FINANCIAL RESOURCES | 16 | 17 | 13 | 12 | 15 | 16 | 17 | 14 | 17 | 15 |
| PEER SUPPORT | 17 | 12 | 15 | 16 | 12 | 15 | 9 | 13 | 14 | 12 |
| COURSE REQUIRED FOR JOB | 8 | 16 | 17 | 17 | 8 | 12 | 14 | 17 | 12 | 15 |
| SPONSOR REQUIRES COURSE | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 16 | 17 |

*Table 12 Reasons Students will complete Program*

# APPENDIX H

## RANKING* COMPARISONS OF STUDENTS PERCEPTIONS FOR WHY STUDENTS WILL COMPLETE TECHNICAL-OCCUPATIONAL PROGRAM

*Ranking is based on Kendall's Coefficient of Concordance Mean Ranks

| Variable Labels | Minority | | | | | White Non-Hispanic | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| College | A | B | C | D | E | A | B | C | D | E |
| WANT JOB TO BE PROUD OF | 2 | 1 | 3 | 1 | 1 | 5 | 4 | 4 | 4 | 5 |
| WANT BETTER PAYING JOB | 1 | 2 | 5 | 2 | 2 | 1 | 8 | 4 | 6 | 4 |
| INTERESTED IN THE SUBJECT | 3 | 3 | 2 | 4 | 1 | 4 | 1 | 2 | 2 | 3 |
| ATTEND CLASS REGULARLY | 3 | 5 | 1 | 2 | 2 | 3 | 3 | 3 | 5 | 1 |
| PERSONALLY MOTIVATED | 6 | 4 | 4 | 4 | 2 | 2 | 2 | 1 | 1 | 2 |
| KEEP CLASS WORK UP TO DATE | 7 | 6 | 6 | 7 | 6 | 1 | 6 | 4 | 3 | 6 |
| DON'T WANT TO WASTE TIME | 10 | 7 | 7 | 6 | 8 | 8 | 7 | 8 | 10 | 7 |
| FAMILY SUPPORT | 5 | 8 | 11 | 8 | 6 | 6 | 9 | 11 | 8 | 10 |
| GOOD BASIC COLLEGE SKILLS | 8 | 10 | 8 | 9 | 11 | 8 | 5 | 7 | 7 | 8 |
| STUDY HARD | 14 | 9 | 8 | 10 | 9 | 13 | 10 | 13 | 12 | 10 |
| DON'T WANT TO WASTE MONEY | 14 | 9 | 8 | 10 | 9 | 13 | 10 | 13 | 12 | 9 |
| INSTRUCTOR SUPPORT | 9 | 11 | 11 | 12 | 14 | 12 | 11 | 12 | 13 | 13 |
| ENJOY CLASSES | 10 | 13 | 13 | 13 | 12 | 10 | 13 | 9 | 11 | 10 |
| FINANCIAL AID | 6 | 14 | 15 | 16 | 16 | 17 | 16 | 17 | 17 | 17 |
| PERSONAL FINANCIAL RESOURCES | 17 | 15 | 14 | 15 | 12 | 15 | 14 | 15 | 15 | 14 |
| PEER SUPPORT | 14 | 16 | 16 | 14 | 15 | 14 | 14 | 15 | 15 | 15 |
| COURSE REQUIRED FOR JOB | 13 | 17 | 17 | 17 | 17 | 16 | 17 | 16 | 16 | 16 |
| SPONSOR REQUIRES COURSE | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |

*Table 13 Reasons Students will complete Program*

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